

09864426-052401

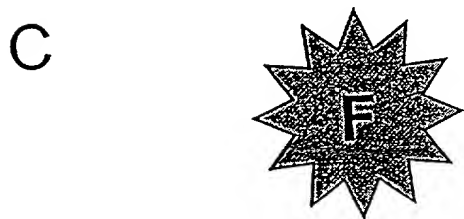
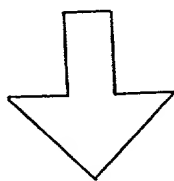
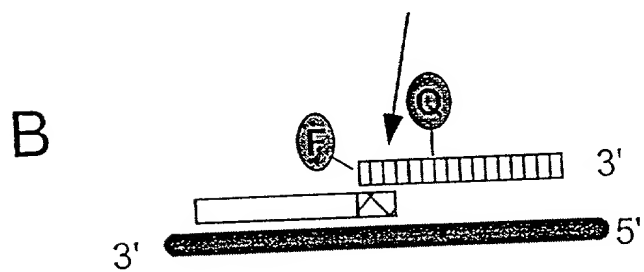
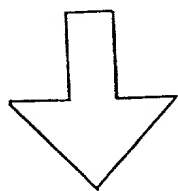
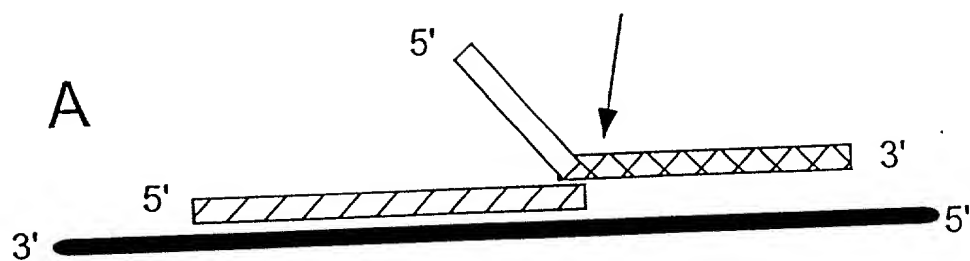
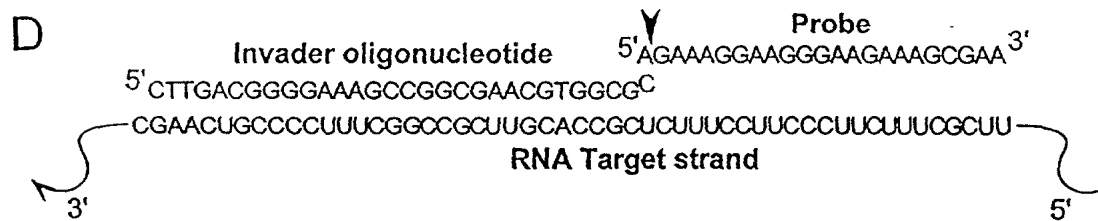
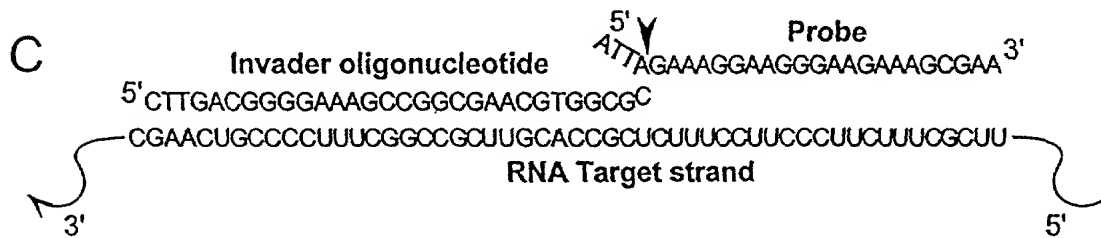
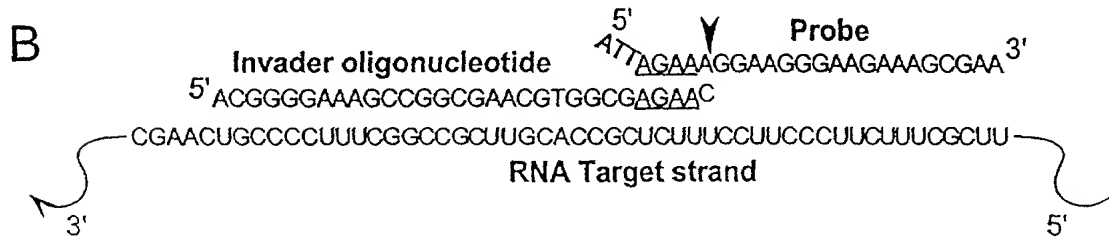
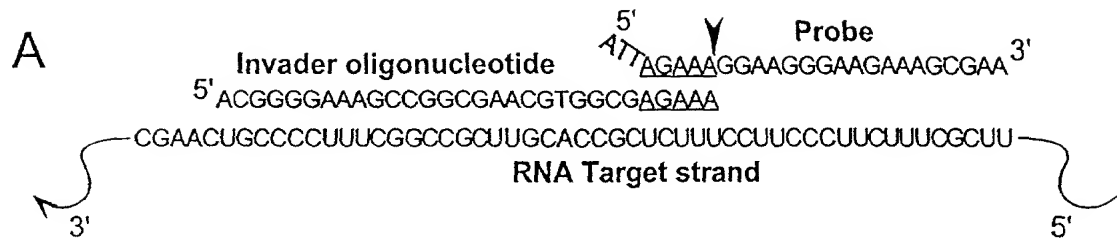


FIGURE 1

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# FIGURE 2



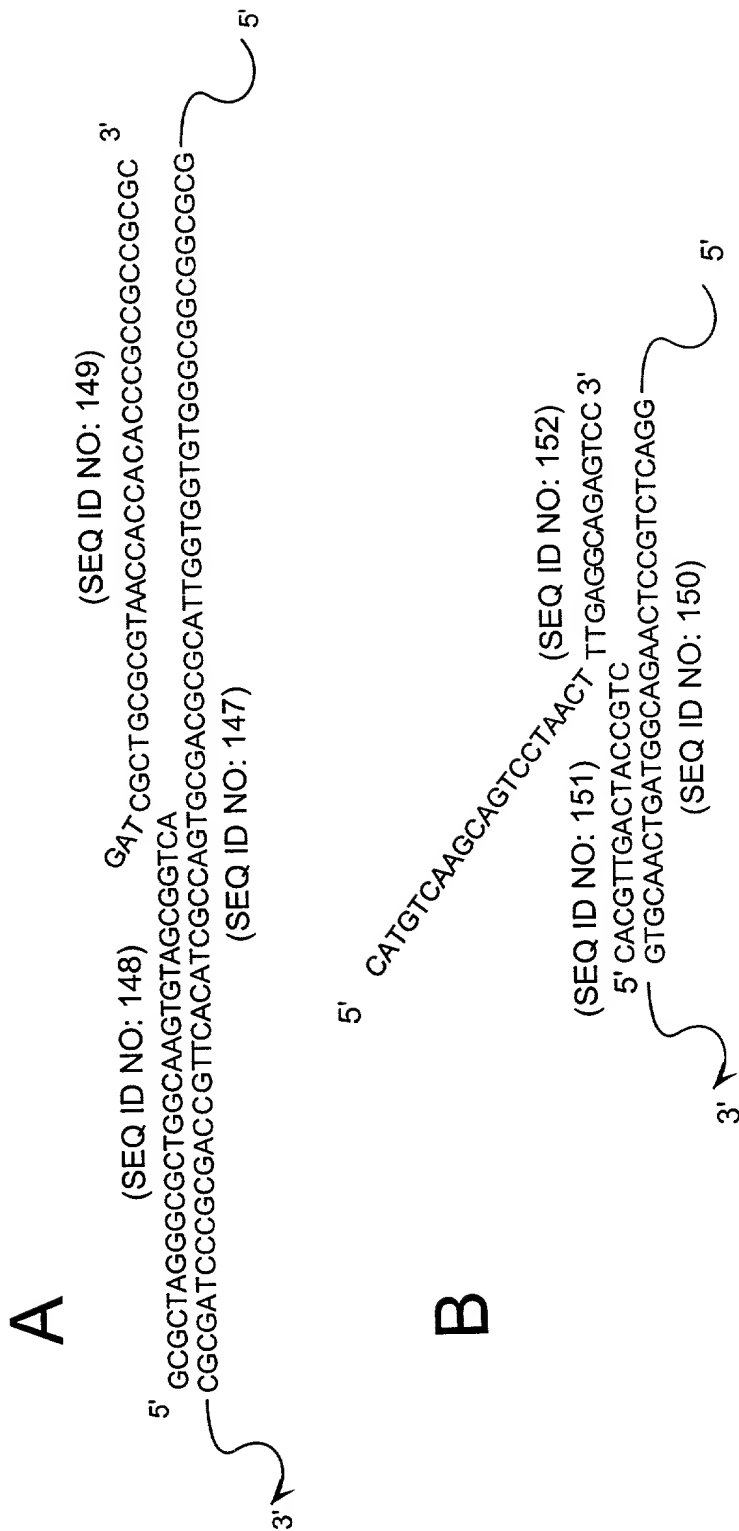


FIGURE 3

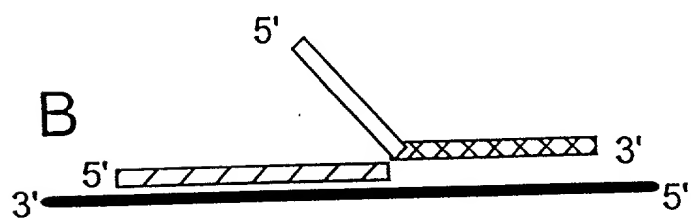
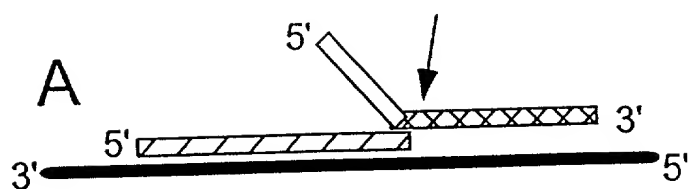


FIGURE 4



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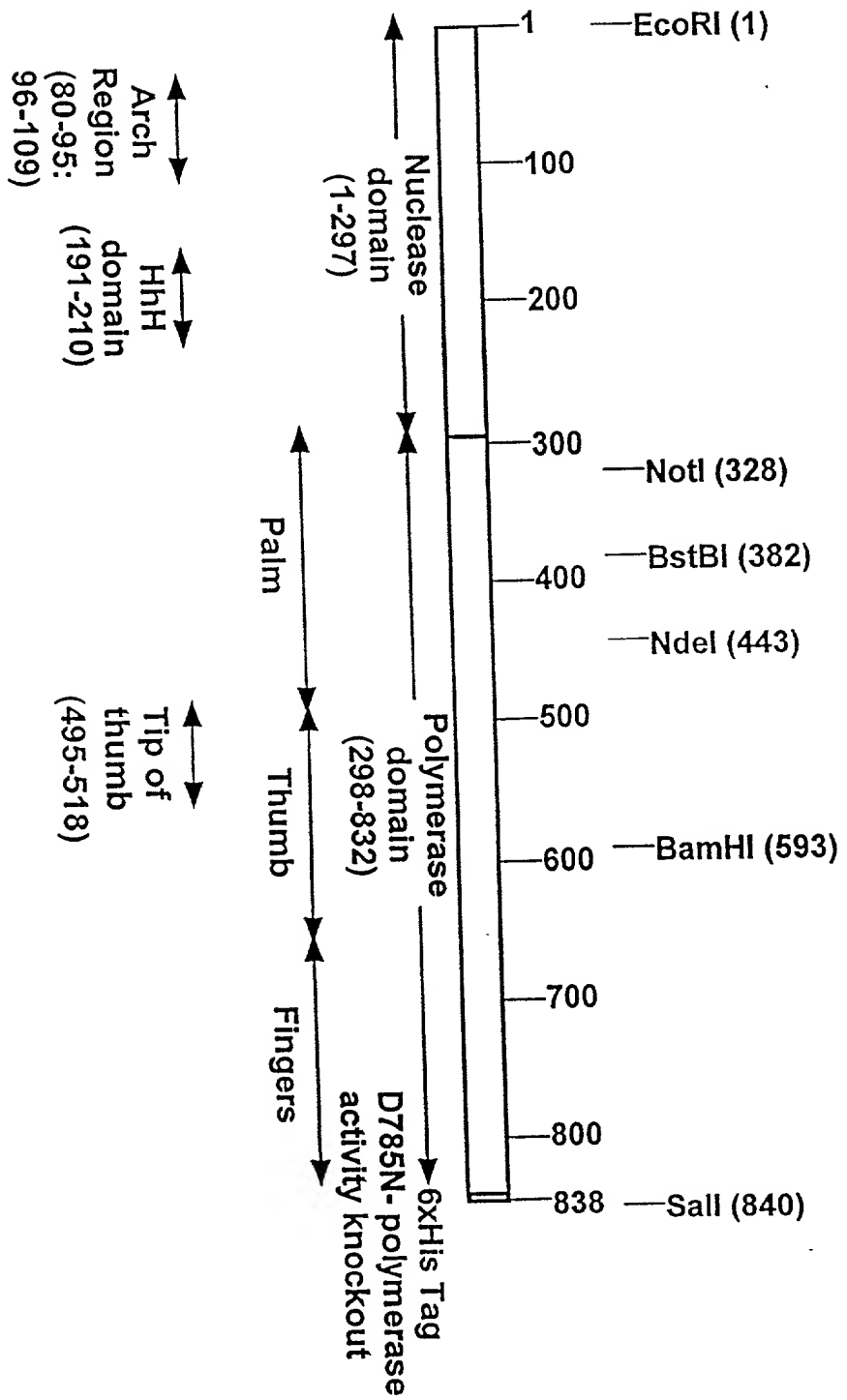


FIGURE 6

09864426 . 032401

096446 02449860

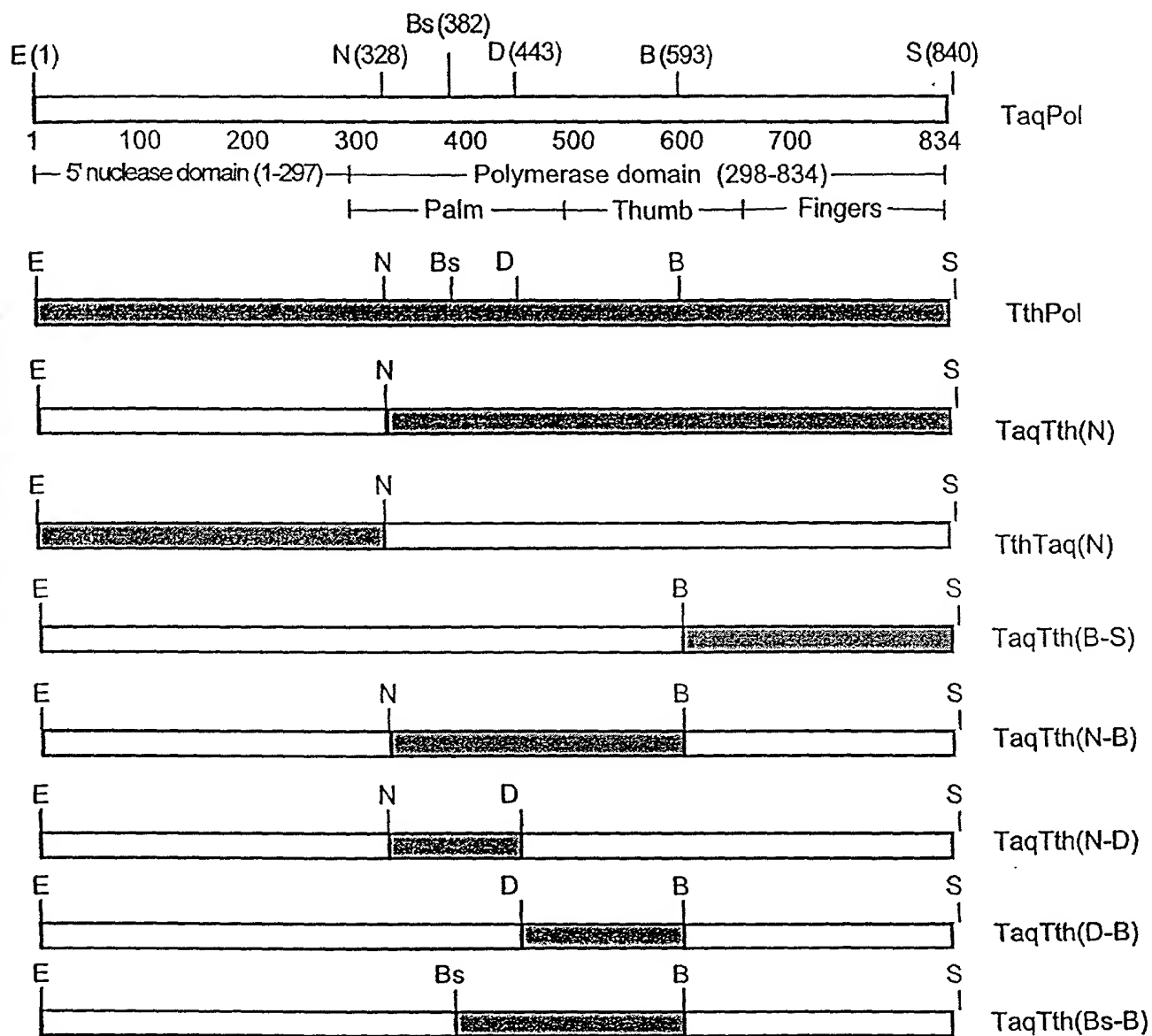


FIGURE 7

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MAJORITY	[SEQ ID NO:156]	GGGGGXCTCCTGGCCAAGGACCTGGCCGTTTGGCCCTGAGGGAGGGCCTXGACCTCXTGCCGGGGGAGG	
DNAPTAQ	[SEQ ID NO:153]	.....G..T.....A.....AG.....C.....A.....T..G.....CC.....C.....	1114
DNAPTFL	[SEQ ID NO:154]	.....AA.....G.....G.....C.....G.....T..G.....A..A.....	1111
DNAPTTH	[SEQ ID NO:155]	.....C.....C.....C.....TC.....G..A.....G.....	1120
MAJORITY	ACGGCATGCTCCTGGCCCTACCTCCTGGAGCCCTCCAAACACACCCCGAGGGGTGGCCGGCGGTACGG		
DNAPTAQ		.....T.....T.....	1184
DNAPTFL		.....G.....T.....T.....T.....	1181
DNAPTTH		.....G.....G.....	1190
MAJORITY	GGGGGAGTGGACGGGAGGAXGGGGGGGAGCGGGCCCTCCTXTCCGAGAGGCTCTTCCXGAACCTXXXGGAG		
DNAPTAQ		.....G.....G.....GC.....T.....GGC.....GTG..G..	1254
DNAPTFL		.....T.....A.....GG.....G..G.....A..C...AAA....	1251
DNAPTTH		.....C..C.CCC.C.....C..G.....CAT..G.....CCTTA..	1260
MAJORITY	CGCCTTGAGGGGGAGGAGGCTCCTTTGGCTTTACGAGGAGGTGGAGAAGCCCTTTCCCGGGTGGTGG		
DNAPTAQ		A..G.....A.....G.....G.....G.....GCT.....	1324
DNAPTFL		.....A.....A..A..AC..G..G.....G.....G.....GT...	1321
DNAPTTH		.....G.....A.....A.....C.....A.....C.....	1330
MAJORITY	CGCAGATGGAGGGGACGGGGGTXCGGGCTGGAGCTGGCCTACCTCCAGGCCCTXTCCCTGGAGGTGGGGGA		
DNAPTAQ		.....G..C.....T...AG...T..G.....C...	1394
DNAPTFL		.....GG.....C.....C.....T.....A..G..	1391
DNAPTTH		.....G.....A.....T.....T.....G..T.....	1400

FIGURE 8E

MAJORITY	[SEQ ID NO:156] GGAGATCGGGGGGCTGGAGGAGGAGGTCTTCGGGCTGGCGGGGCGAGCCCTTCAACCTCAACTCGGGGGGAC	1464
DNAPTAQ	[SEQ ID NO:153].....GC.....CC.....	1461
DNAPTFL	[SEQ ID NO:154].....G.G....AG..G.....	1470
DNAPTTH	[SEQ ID NO:155].....T.....G.....	
MAJORITY	CAGCTGGAAAGGCTGCTCTTTGACGAGGCTXGGGCTTCCGGCCATCGGCAAGACGGAGAGACXGGCAAGC	
DNAPTAQ	.....G.....A.....	1534
DNAPTFL	.....GC.....G..G..T.....	1531
DNAPTTH	.....TA.....T.G..G.....C.A.....	1540
MAJORITY	GGTCGACGAGGGCGGCTGCTGGAGGGCTXGGXGAGGGCGCCAGCCCATCGTGGAGAAAGATCCTGCAGTA	
DNAPTAQ	.....G.....C.....	1604
DNAPTFL	.....T.....G..A.....GGG.....	1601
DNAPTTH	.....G.....A..G.....	1610
MAJORITY	CGGGGAGCTCAGCAAGCTCAAGAACAGCCTACATXGACCCCTGGCXGXCCTCGTCCAGCCGAGAGCGGGC	
DNAPTAQ	.....G...G.....T.....T...G.A.....	1674
DNAPTFL	.....A.....A.....C.G.....A...C...	1671
DNAPTTH	.....G.G.....C..AAG.....G.....	1680
MAJORITY	CGGCTGCACACGGGCTTCAACGACAGGGCCACGGCCAGGGGAGGCTTAGTAGCTCGGAGCCCAACCTGC	
DNAPTAQ	.....A.....T.....C.	1744
DNAPTFL	.....G.....G.....TCG.....	1741
DNAPTTH	.....G.....G.....	1750



MAJORITY	[SEQ ID NO:156]	AGAACATCGCGCGTGGGACGGCGXCTGGGCCAGAGGATCGGCCGGGGCTTCGTGGCCGAGGAGGGGTGGGT	
DNAPTAQ	[SEQ ID NO:153]	.....G..T..G.....A..C.....G...C.	1814
DNAPTFL	[SEQ ID NO:154]	.....G.....T.....C..C.....A.....G.....C.....	1811
DNAPTTH	[SEQ ID NO:155]	.....CT.....G.....T.....C.....T.....C.....	1820
MAJORITY	GTGGTGGCGCTGGACTATAGCCAGATAGAGCTCGGGGTCTGGGGCAGCTCTCGGGGAGGAGAACCTG		
DNAPTAQ	A.....T.....T.....A.....G.....C.....		1884
DNAPTFL	G.....T.....C.....T.....T.....C.....		1881
DNAPTTH	.....T.....C.....C.....C.....A.....		1890
MAJORITY	ATCGCGGTCTTCAGGAGGGAGGGACATCCACACCGAGAGCGCGGAGCTGGATGTTGGCGGTCCCGCCGGG		
DNAPTAQ	.....G.....G.....G.....G.....G.....G...		1954
DNAPTFL	.....T.....A.....A.....A.....T.....T.....G.		1951
DNAPTTH	.....A.....A.....A.....A.....A.....A.....		1960
MAJORITY	AGCGCGTGGACCGCTGATCGCGCGGGGGCCAAAGACCATCAACTTCGGGGTCCCTCTACGGGCATGTCCGC		
DNAPTAQ	.....A..GG..A.....T.....GG..G.....G...		2024
DNAPTFL	.....A..GG..A.....T.....GG..G.....G.....		2021
DNAPTTH	.....A..GG..A.....T.....GG..G.....G.....		2030
MAJORITY	GCACGGCGCTCTCGGAGGAGCTTGGCATCCCTACGAGGAGGGGTGGCGTTCAATGAGCGCTACTTCCAG		
DNAPTAQ	.....A.....T.....CCA.....T...		2094
DNAPTFL	.....GG.....T.....T.....T.....		2091
DNAPTTH	...TA.G.....T..A.....A.....		2100

MAJORITY	[SEQ ID NO:156]	AGCTTCCGCCAAGGTGGGGGGCTGCATTGAGAAAGACCCCTGGAGGAGGGCAGGAGGGGGGTACGTGGAGA	2164
DNAPTAQ	[SEQ ID NO:153]	.....	2161
DNAPTFL	[SEQ ID NO:154]	.....A.....GG.....C.....C.CC.....T.....	2170
DNAPTTH	[SEQ ID NO:155]	.....A.....A.....G.....A.....C.....A.....	
MAJORITY	CCCTCTTGGGGCGGGGGCTACGTGCCCCGACCTCAAGCCCGGGTGAAAGAGCCGTGCGGGCAGGGCGCGGA		
DNAPTAQ		.....C.....A.....AG.G.....C.....	2234
DNAPTFL		.....T.....	2231
DNAPTTH		.....AA.AA.....	2240
MAJORITY	GGGCATGGCCTTCAACATGGCCGTGGAGGGCAGCCGGCGGACCTCATGAAGCTGGCCCATGCTGAAGCTG		
DNAPTAQ		.....T.....	2304
DNAPTFL		.....G.....	2301
DNAPTTH		.....	2310
MAJORITY	TTCCCGCGGCTXCAGGAAATGGGGGCCAGGATGCTGCTXCAGGTCGACGAGGAGCTGGTGGTGGAGGGGG		
DNAPTAQ		.....A.....GG.....T.....	2374
DNAPTFL		.....T.....G.....TT.G.....G.....	2371
DNAPTTH		.....C..C.G..G.....C.C.....C.....GG.....G.....	2380
MAJORITY	GCAAGAGCGGGGAGGXGGTGGCGCGCTTGGCCAAAGGAGGTGATGGAGGGGGTGTATGGCGTGGCGGT		
DNAPTAQ		.....A.....A.....CC.....GGG.....G.....	2444
DNAPTFL		.....G..C.....AG...A.....	2441
DNAPTTH		.....C..C.....G.....A.....AA..C.....C.....	2450

# FIGURE 3H "S" 24443350

MAJORITY	[SEQ ID NO:156]	GGCCGCTGGAGGCTGGAGGCTGGGGATGGGGGAGGACTGGCTCTCGCGCAAGGAGTAG
DNAPTAQ	[SEQ ID NO:153]	.....A.....GA
DNAPTFL	[SEQ ID NO:154]	.....CC.....GT...
DNAPTTH	[SEQ ID NO:155]	.....T.....GT...

2499  
2496  
2505

FIGURE 9A

MAJORITY	[SEQ ID NO:159]MXAML PLFEPKGRVLLVDGHHLAYRTFFALKGLTTSRGEPVQAVYGFAKSLKALKEDG- DAVXVVVFDK	
TAQ PRO	[SEQ ID NO:157]. RG.....H.....I.....	69
TFL PRO	[SEQ ID NO:158]. .....	68
TTH PRO	[SEQ ID NO:1] E.....YK..F.....	70
MAJORITY	APSRHEAYEAYKAGRPTPEDFPRQLALIKELVDLLGLXRLEVPGYEADDVLATLAKKAEKEGYEVRL	
TAQ PRO	.....GG.....A.....S.....	139
TFL PRO	.....V.....F.....R.....	138
TTH PRO	.....FT.....	140
MAJORITY	TADRDLYQLLSDRIAVLHPGEYLITPAWLWEKYLGRPEQWVDYRALXGDPSPDNLPGVKIGI GEKTAXKLLX	
TAQ PRO	.....K.....H.....D..A.....T..E.....R....E 209	
TFL PRO	.....E..I.....Y.....A.....I.....QR..IR 208	
TTH PRO	.....V...V.....H...E.....F...V.....L...K 210	
MAJORITY	EWGSLNLLKNLDRVKP- XXREKI XAHMEDLXLXXLSXVRTDLPLEVDFAXRREPDREGLRAFLEF	
TAQ PRO	.....A.....L...AI.....L...D..K..WD.AK.....K.....R.....	278
TFL PRO	.....FQH..Q...SL...LO.G..A.A..RK..Q.H.....GR..T.NL.....	277
TTH PRO	.....ENV.....K..L...R..LE..R.....L.QG.....	280
MAJORITY	GSLHFEGLLEXPKALEEAPWPPPEGAFVGFVLSRPEPMWAEALLAAARXGRVHRAXDPLXGLRDLKEV	
TAQ PRO	.....S.....K.....D.....G.....PE.YKA.....A 348	
TFL PRO	.....G..A.....L..SF.....G.WE..L...Q...R.....G. 347	
TTH PRO	.....A.AP.....K...C.D.....A...A..K..... 350	

MAJORITY	[SEQ ID NO:159]	RGLLAKDLAVLALREGLDLXPGDDPMLLAYLLDPSNTTPEGVARRYGGEWTE DAGERALLSERLFXNLXX	
TAQ PRO	[SEQ ID NO:157]	S.....G. P.....E.....A.....A.....WG	418
TFL PRO	[SEQ ID NO:158]	I.....F. E.....A.....QT. KE	417
TTH PRO	[SEQ ID NO:1]	S.....V.....AH.....HR..LK	420
MAJORITY	RLEGEERLLWLYXEVEKPLSRVLAHMEATGVRLDVAYLQALSLEVAEEIRRL EEEVFRLAGHPFNLNSRD		
TAQ PRO	R...R...A...R.....A.....A.....		488
TFL PRO	K.....E.....R.....EA.V.Q.....		487
TTH PRO	K.....H.....L.....		490
MAJORITY	QLERVLFDELGLPAIGKTEKTGKRSTSAAVLEALREAHPIVEKILQYRELTCLKNTYIDPLXLVHPRTG		
TAQ PRO	.....S.....D. I.....		558
TFL PRO	.....DR.....A....K..		557
TTH PRO	R...L...Q.....H.....V.....S.....		560
MAJORITY	RLHTRFNQTATATGRLSSSDPNLQNI PVRTPLGORI RRAFVAEEGWXLVALDYSOIELRVLAHLSGDENL		
TAQ PRO	.....I.....L.....		628
TFL PRO	.....V..V.....		627
TTH PRO	.....A..A.....		630
MAJORITY	IRVFQEGRDIHTQTASWMFGVPPPEAVDPLMRBAAKTI NFGVLYGMSAHRLSOELAI PYEEAVAFIERYFQ		
TAQ PRO	.....E.....R.....O.....		698
TFL PRO	.....S..G.....G..S.....		697
TTH PRO	.....K.....V.....		700

FIGURE 9C

MAJORITY	[SEQ ID NO:159]	SF PKVRAWI E K T L E E G R R R G Y V E T L F G R R R Y V P D L N A R V K S V R E A A E R M A F N M P V O G T A A D L M K L A M V K L	768
TAQ PRO	[SEQ ID NO:157]	..... E .....	767
TFL PRO	[SEQ ID NO:158]	..... G ..... Y .....	770
TTH PRO	[SEQ ID NO:1]	..... K ..... .....	
MAJORITY	FPRLXEMGARM L Q V H D E L V L E A P K X R A E X V A A L A K E V M E G V Y P L A V P L E V E V G X G E D W L S A K E X		
TAQ PRO	..... E .....	..... E .....	833
TFL PRO	..... Q. L .....	..... D. R .....	831
TTH PRO	..... R .....	..... L. Q .....	835
		..... L. Q A. E .....	
		..... A. K A. M. G .....	

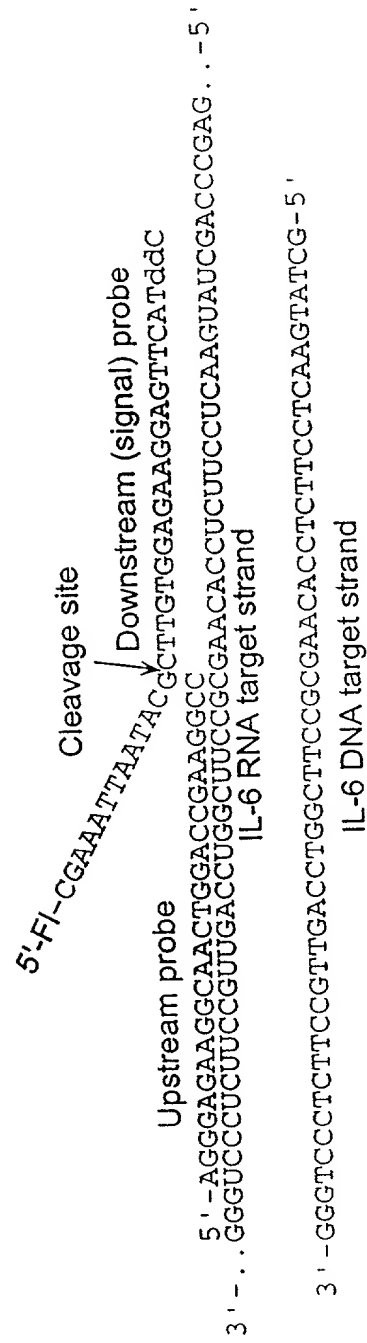


FIGURE 10

096443-0540  
T04250-9249860

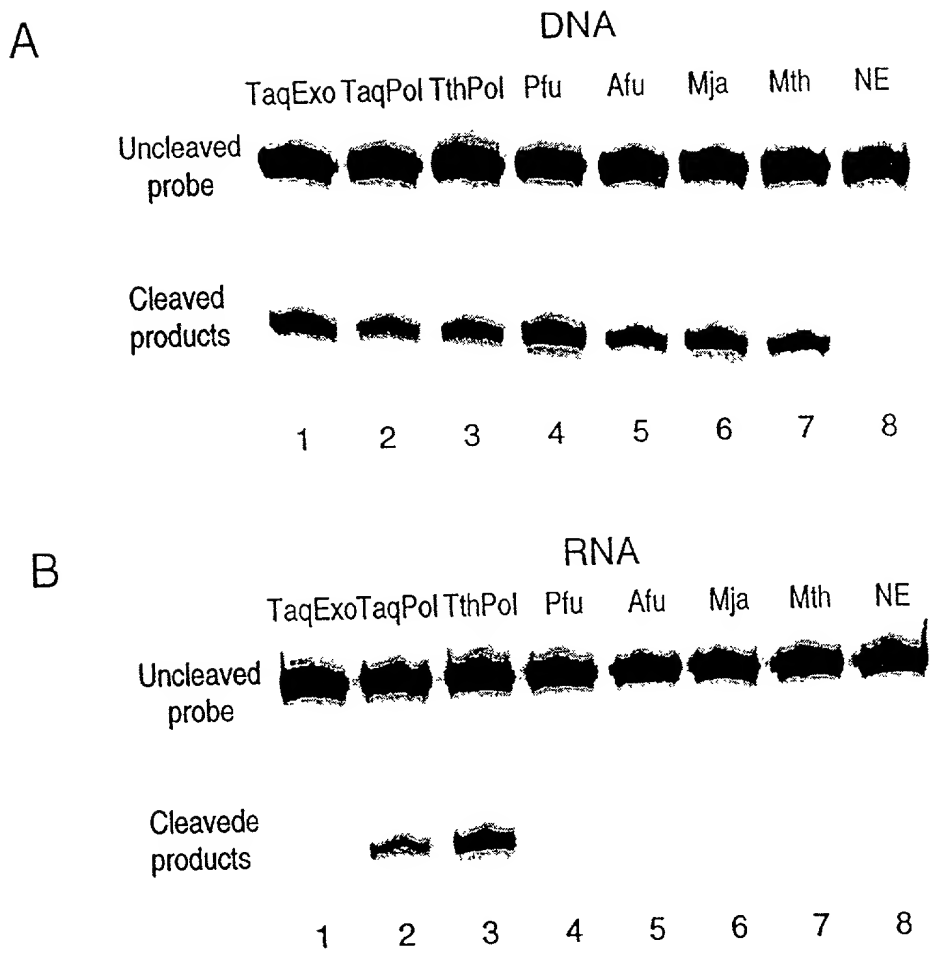


FIGURE 11

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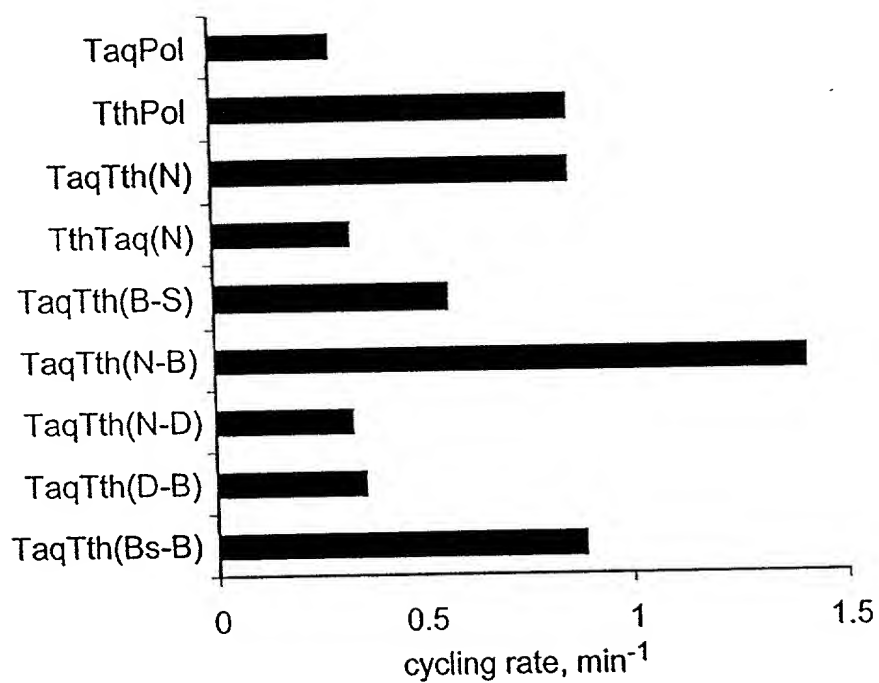


FIGURE 12

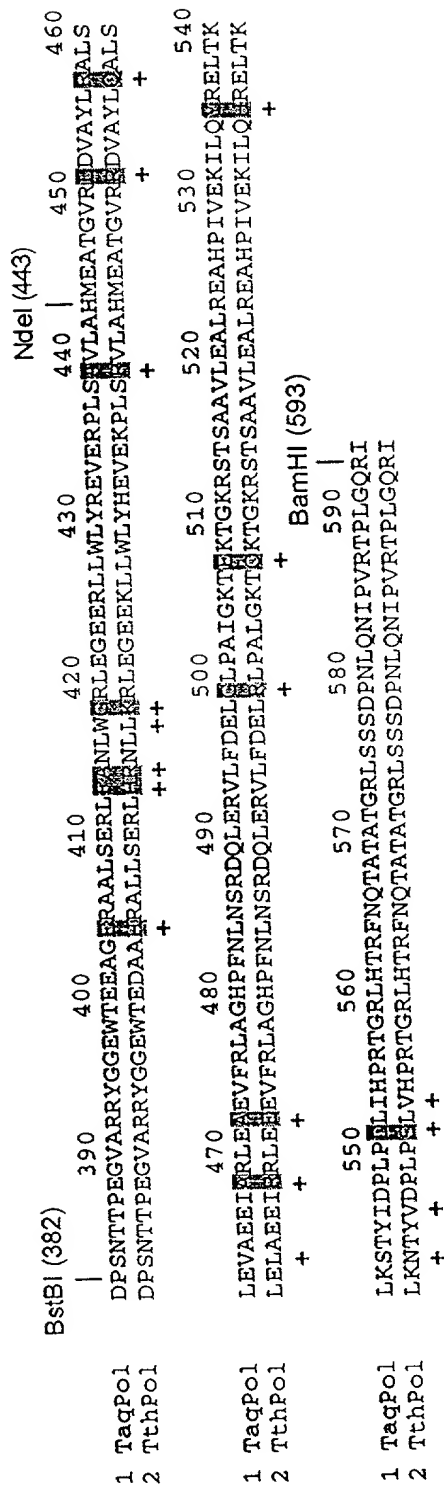


FIGURE 13

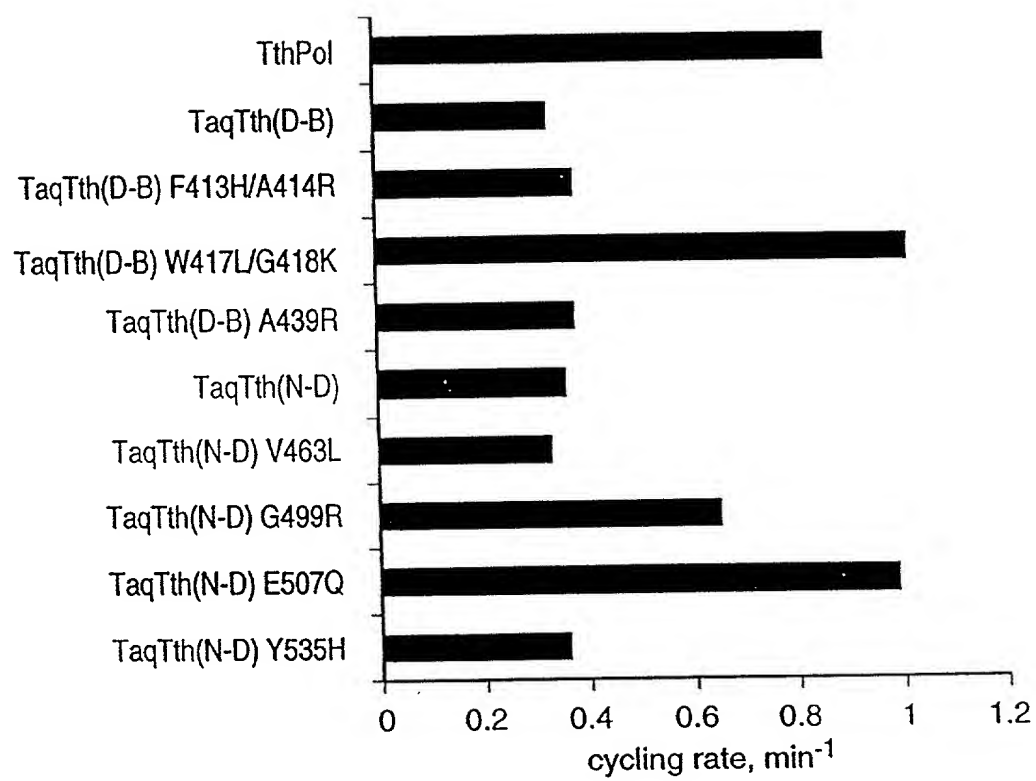


FIGURE 14

098442-0504  
T0250-244960

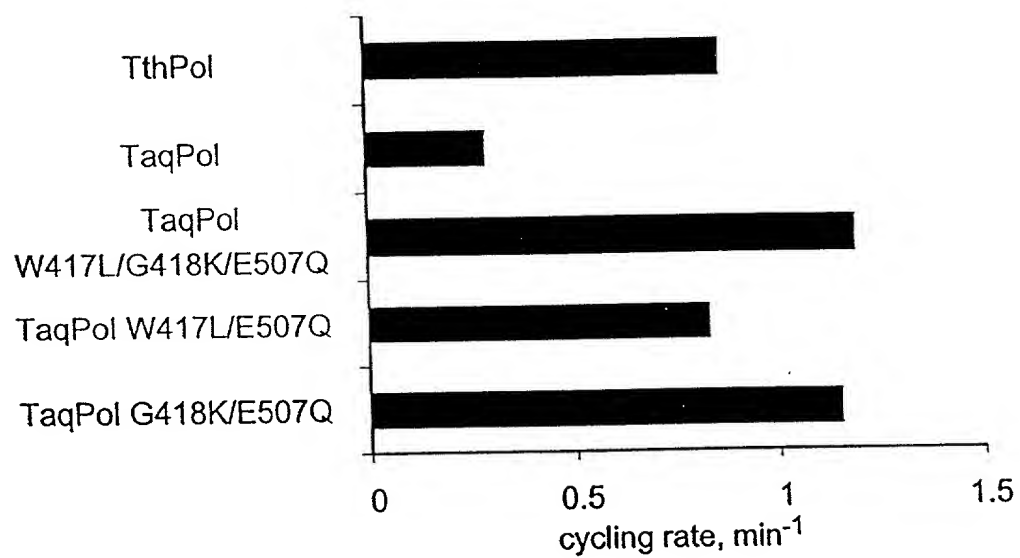


FIGURE 15

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096443-024950


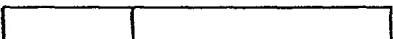




		Polymerase Activity Assays	
		% Fl-labeled dUTP incorporated	
		RNA, p(A) or DNA, p(dA) Template	
Nuclease Domain	Polymerase Domain		
		5.8 (1.00)	14.8 (1.00)
Tth			
		0.8 (0.14)	15.0 (1.01)
Taq			
		4.88 (0.84)	12.9 (0.87)
TaqTth(N)			
		0.58 (0.10)	13.3 (0.90)
TaqTth(N-B)			
		6.60 (1.14)	14.9 (1.01)
TaqTth(B-S)			
		0.42 (0.07)	12.6 (0.85)
Taq(W417L/G418K/E507Q)			

FIGURE 16

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FIGURE 17

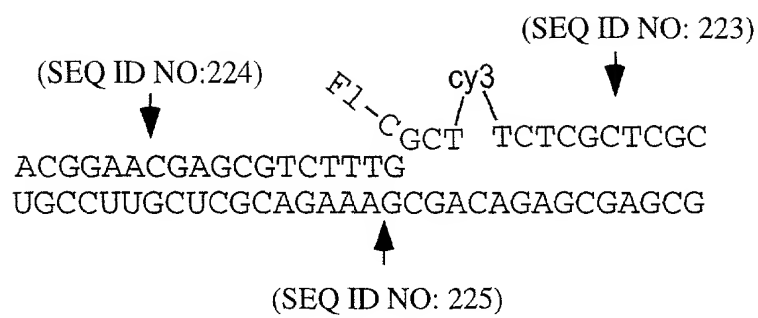


FIGURE 18A

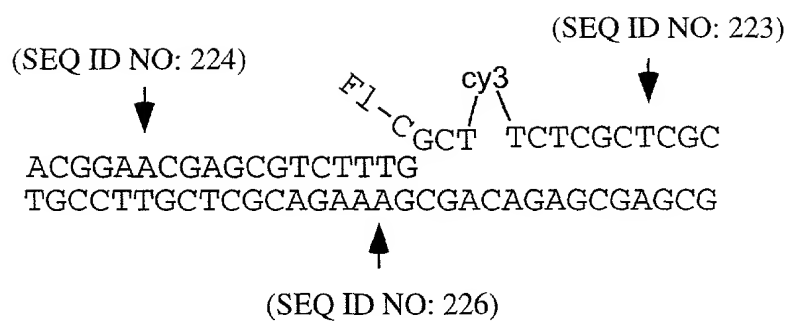


FIGURE 18B



TopSeq 924980

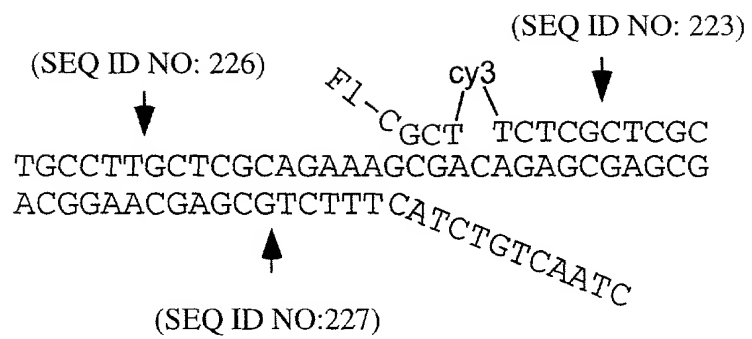


FIGURE 18C

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104230 924950

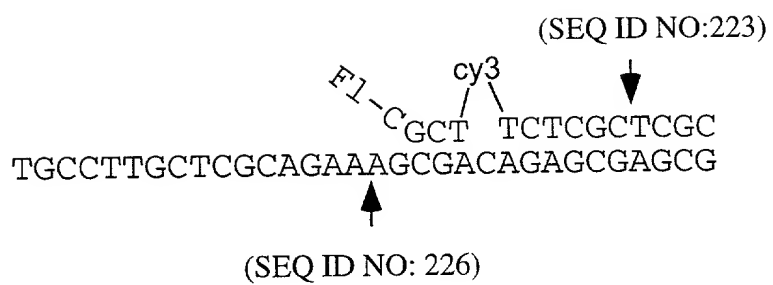


FIGURE 18D

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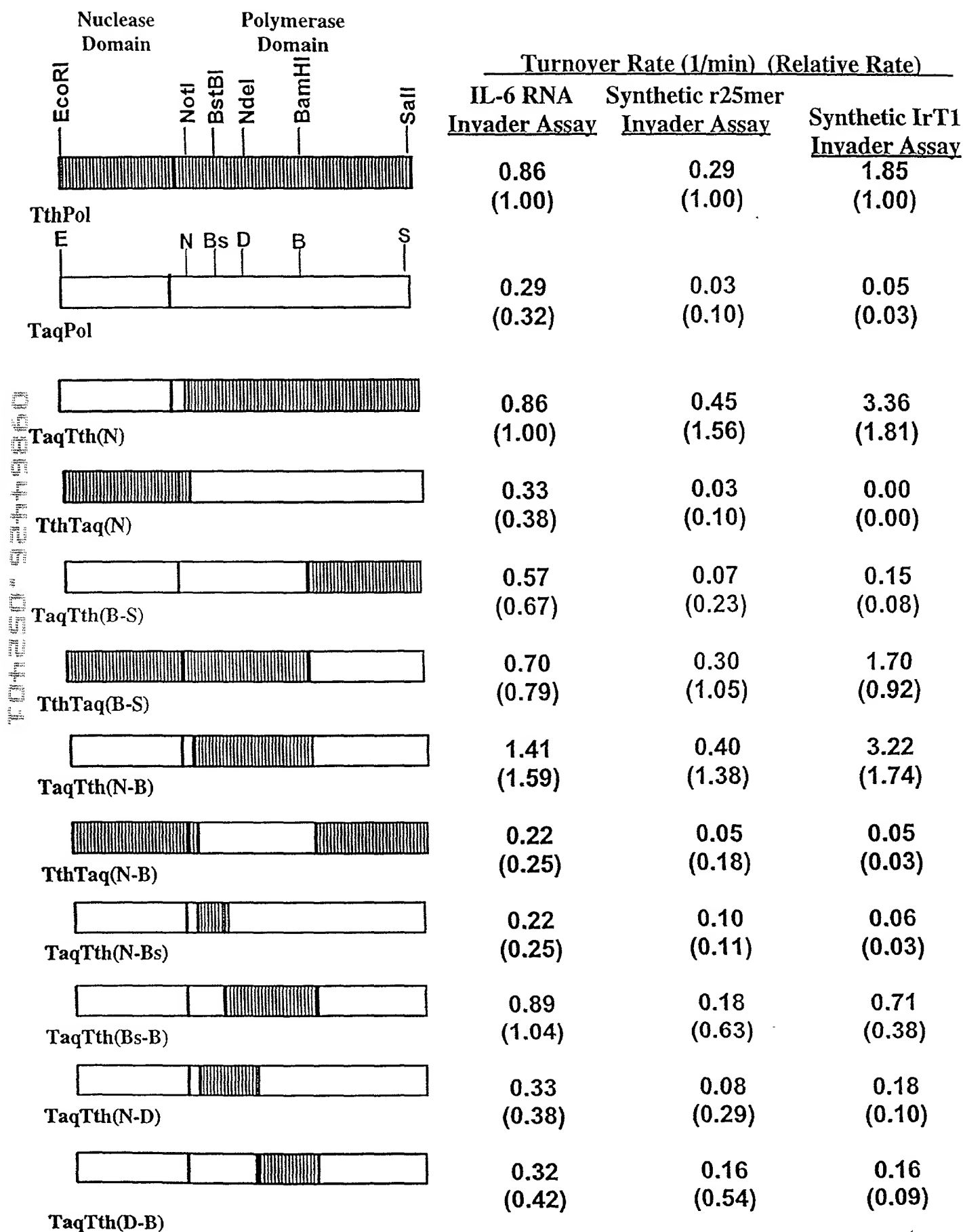


FIGURE 19

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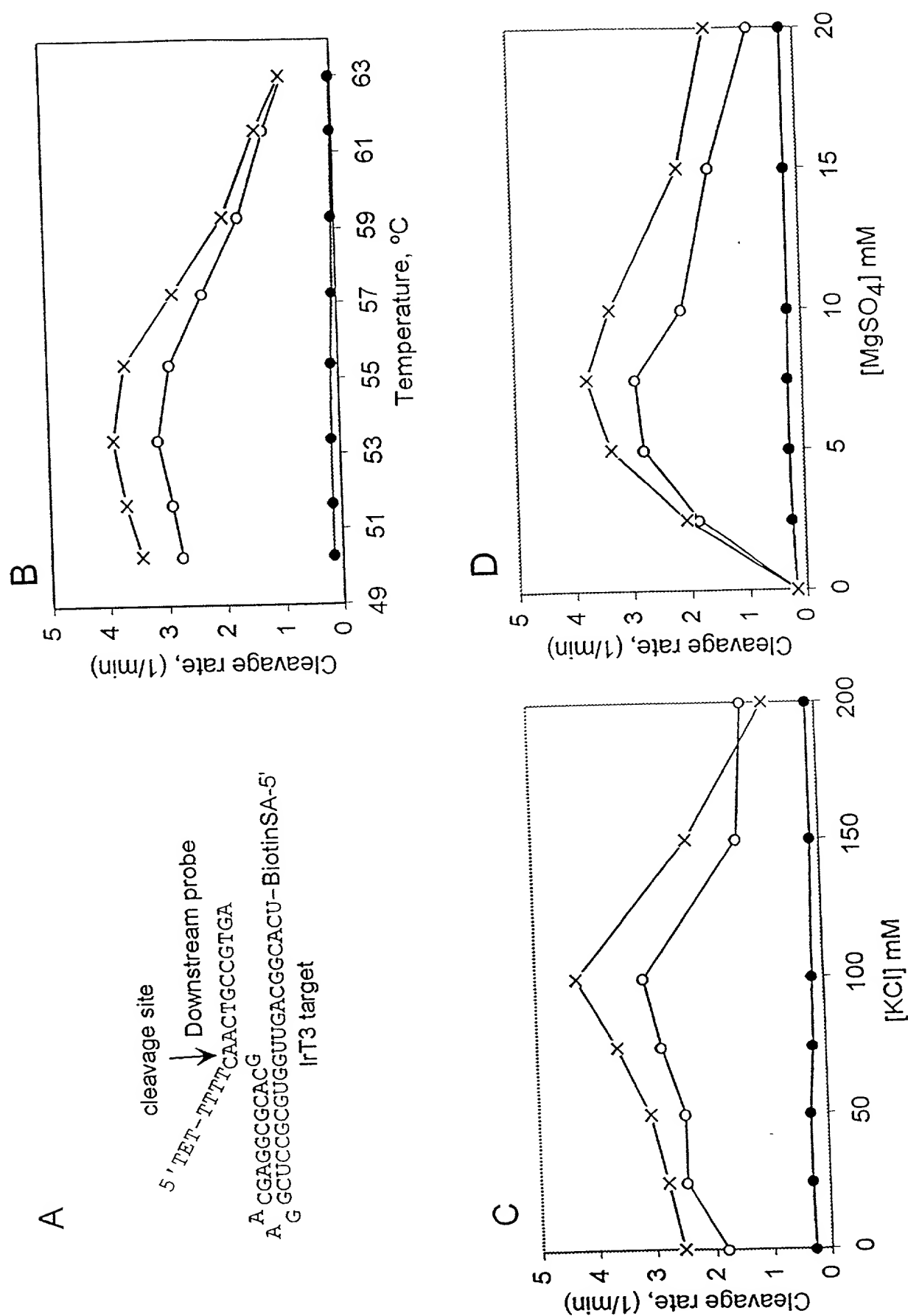


FIGURE 20

# FIGURE 21

A

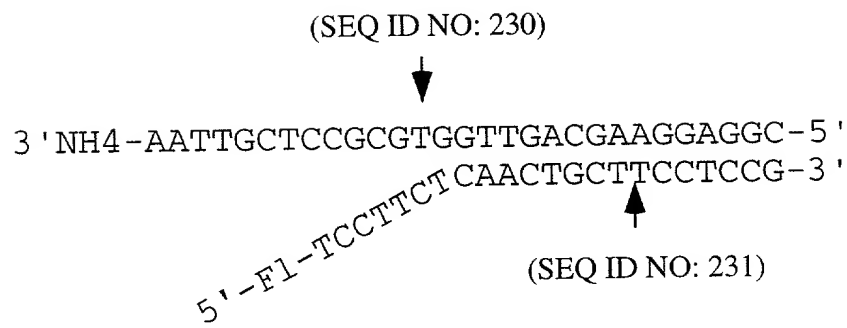
5'-tet-TTTCAACTGCCGTGA  
<sup>A</sup>CGAGGCGCACG  
<sup>A</sup>GCTCCGCGTGGTTGACGGCACT

B

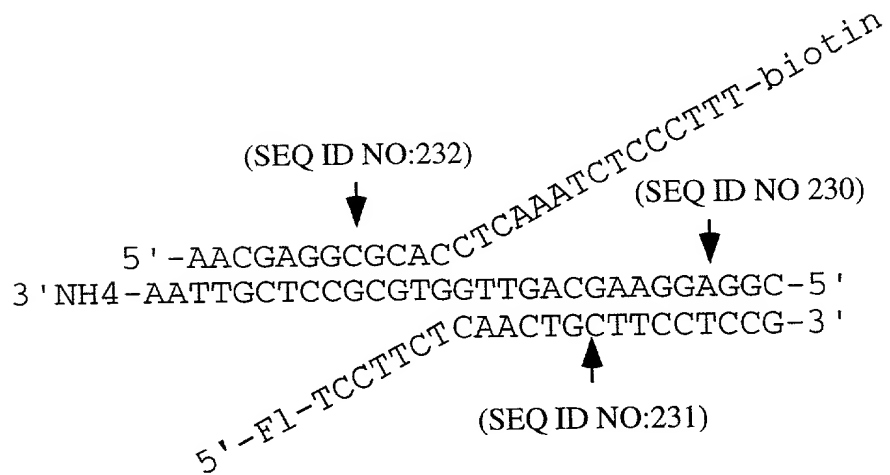
5'-tet-TTTCAACTGCCGTGA  
<sup>A</sup>CGAGGCGCACG  
<sup>A</sup>GCUCCGCGUGGUUGACGGCACU-BiotinSA-5'

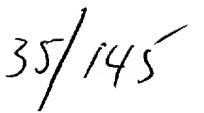
# FIGURE 22

A

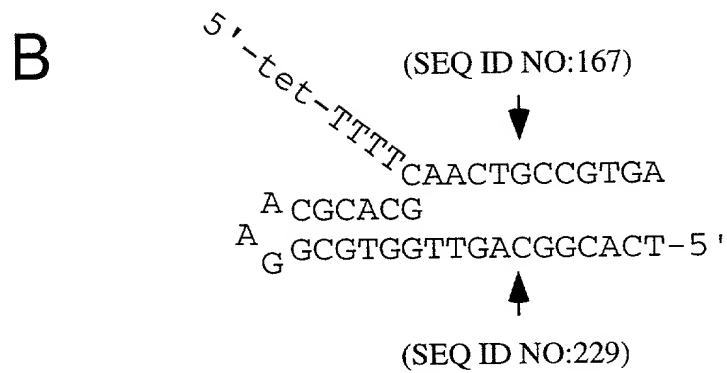
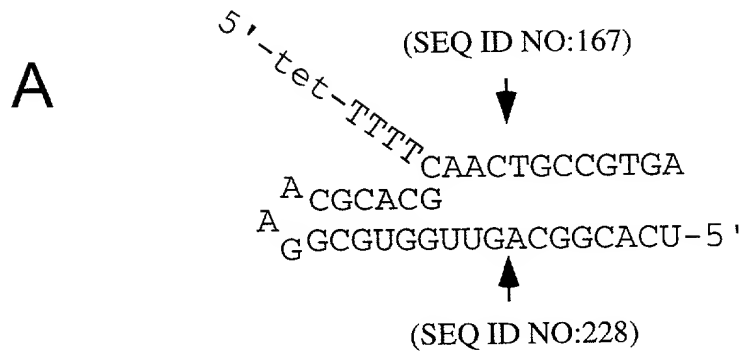


B



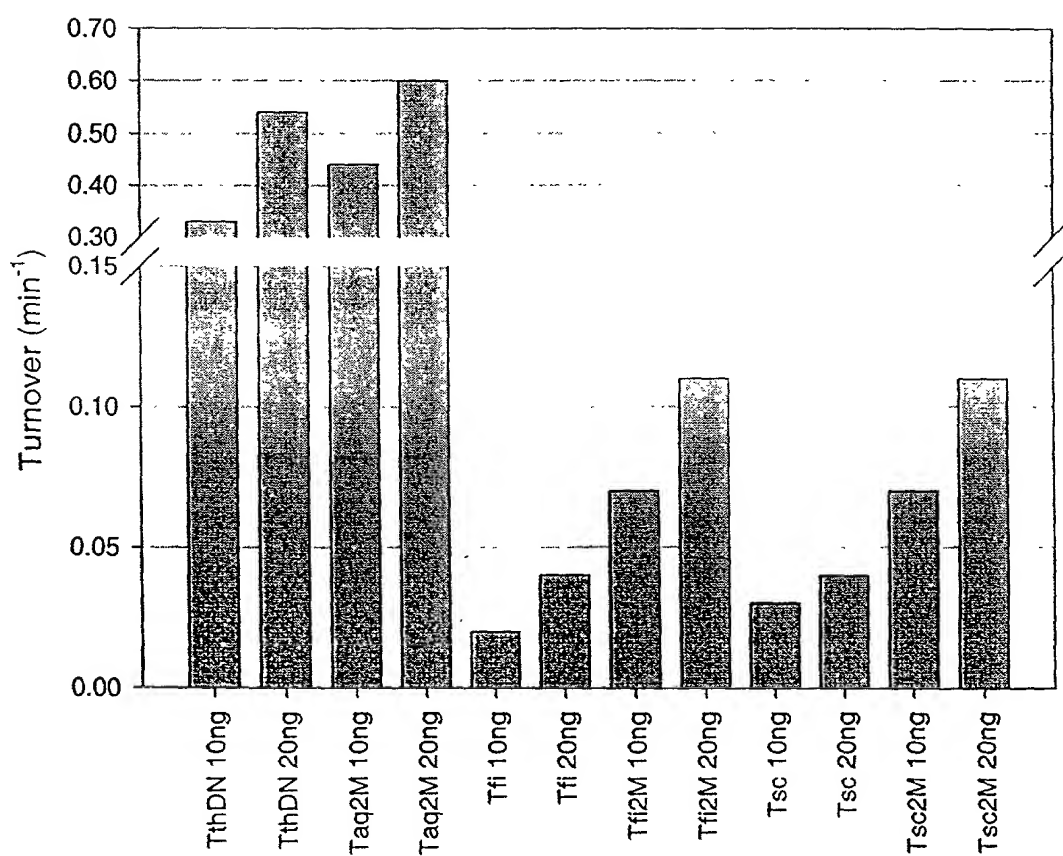
[illegible]

# FIGURE 24



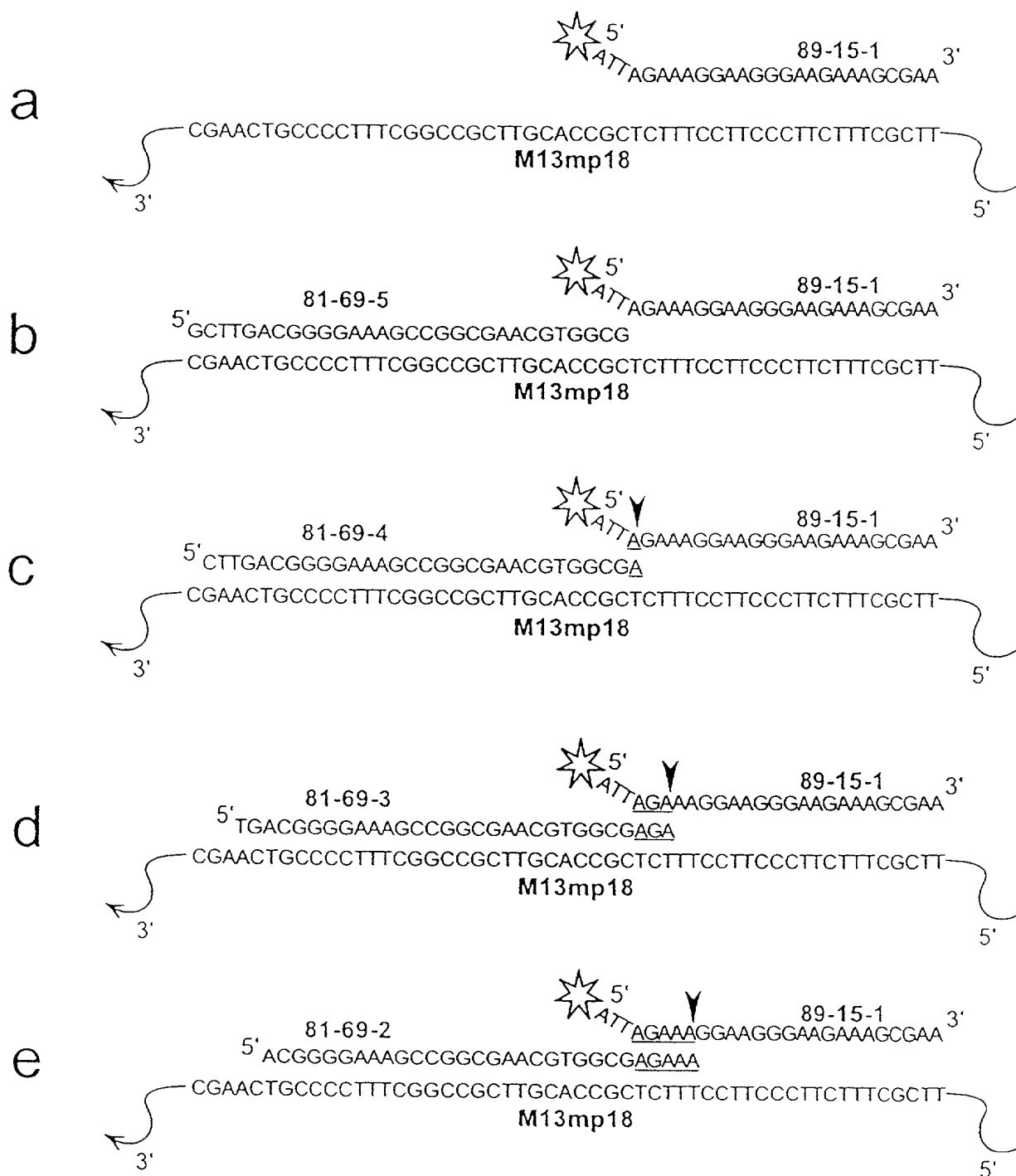


# FIGURE 25



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FIGURE 26



0954420 92449860

FIGURE 27

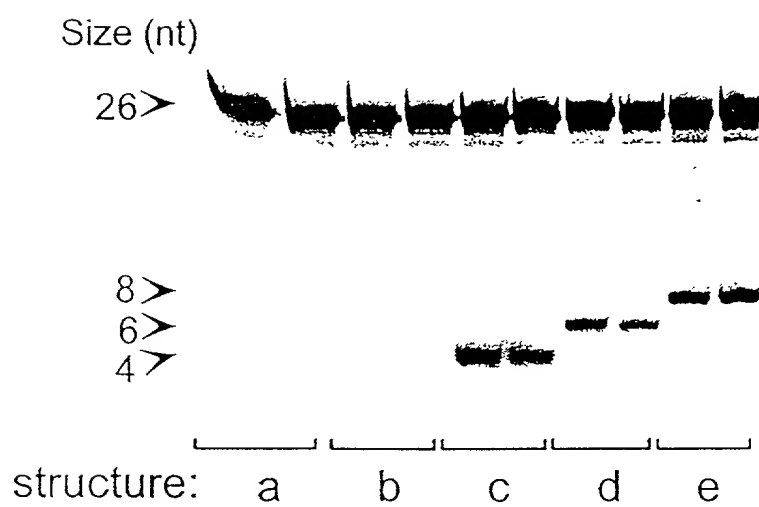
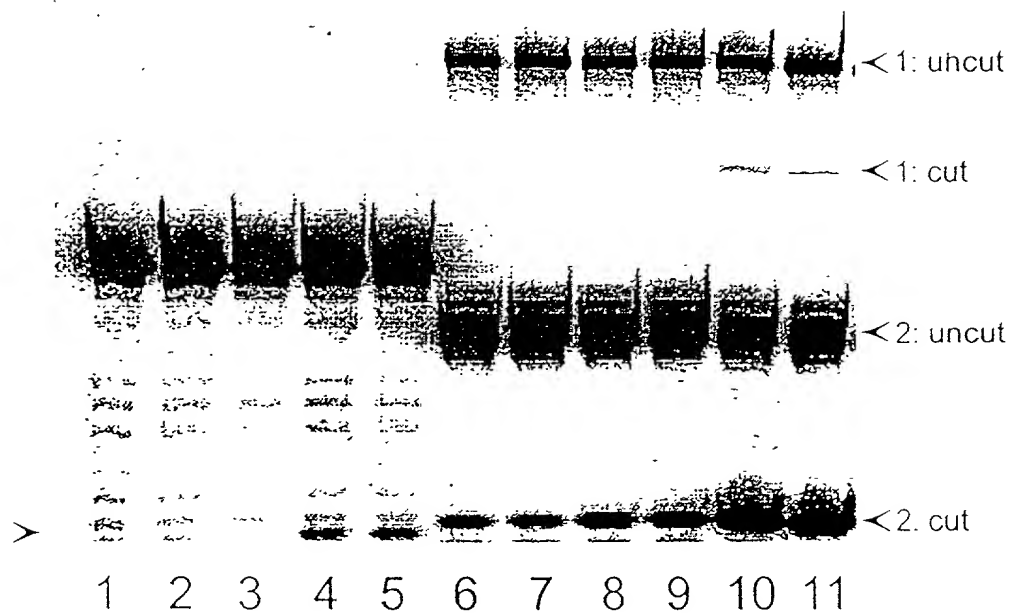
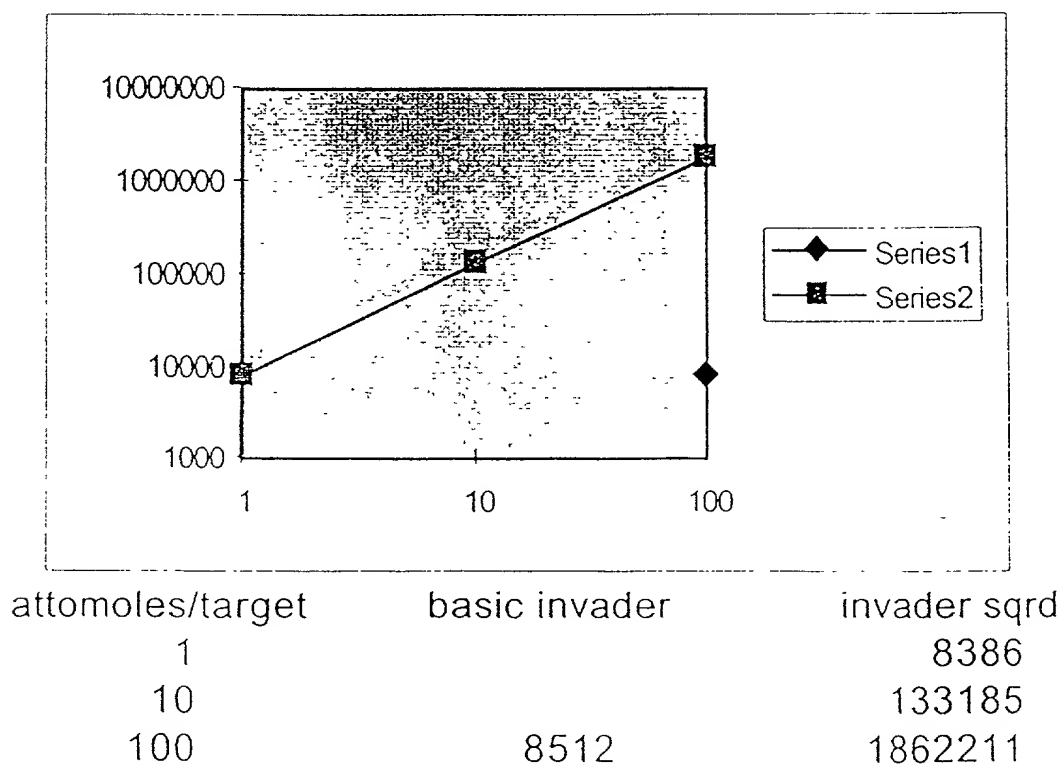


FIGURE 28

a



b



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FIGURE 29

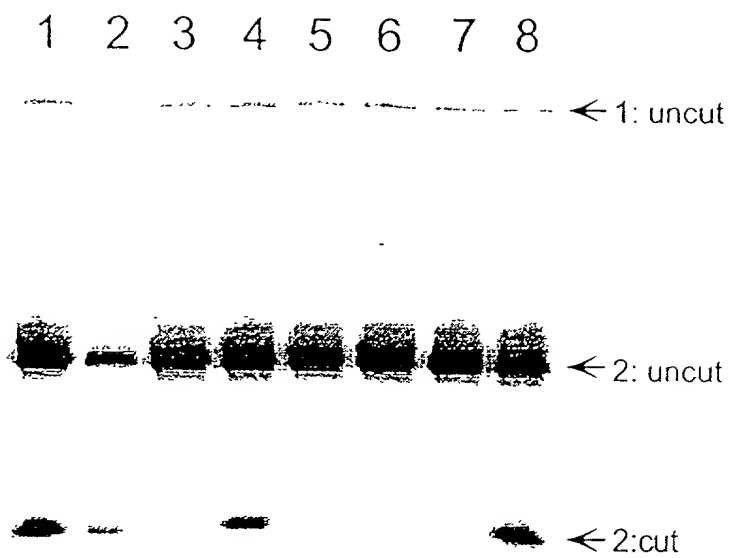




FIGURE 31

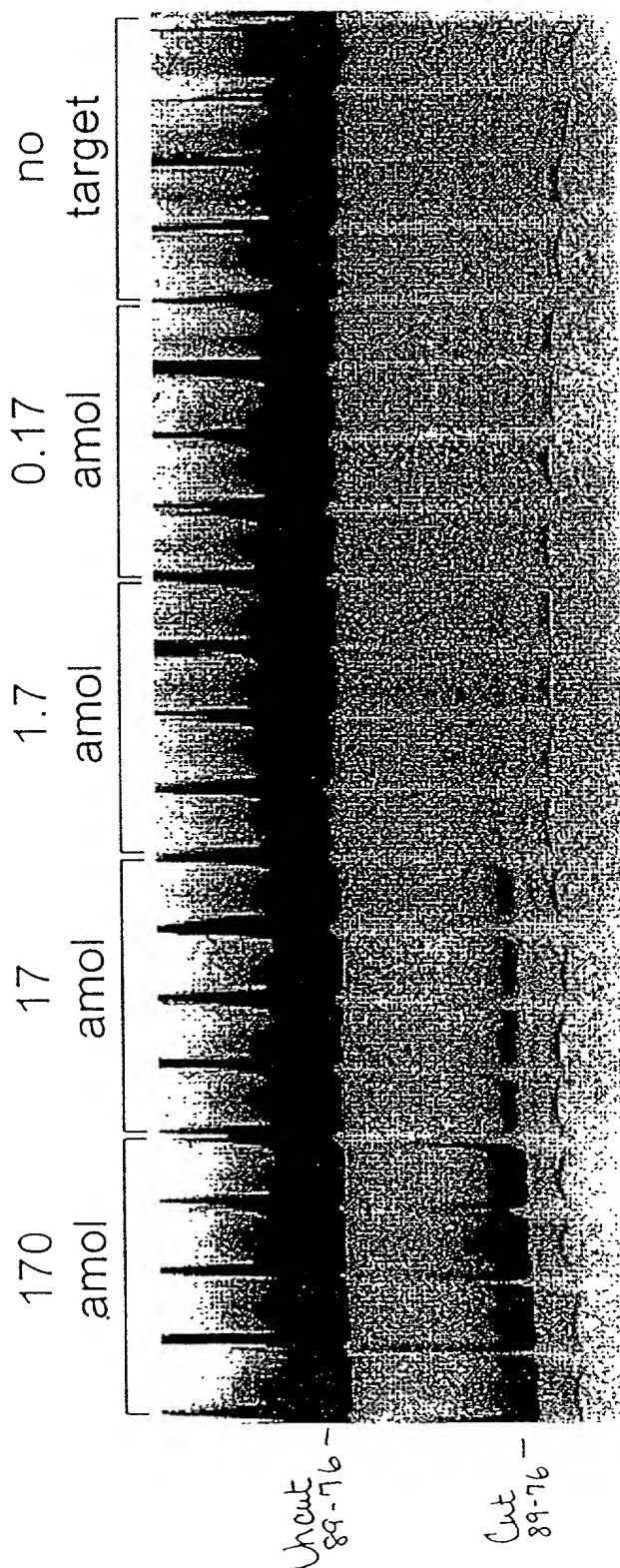
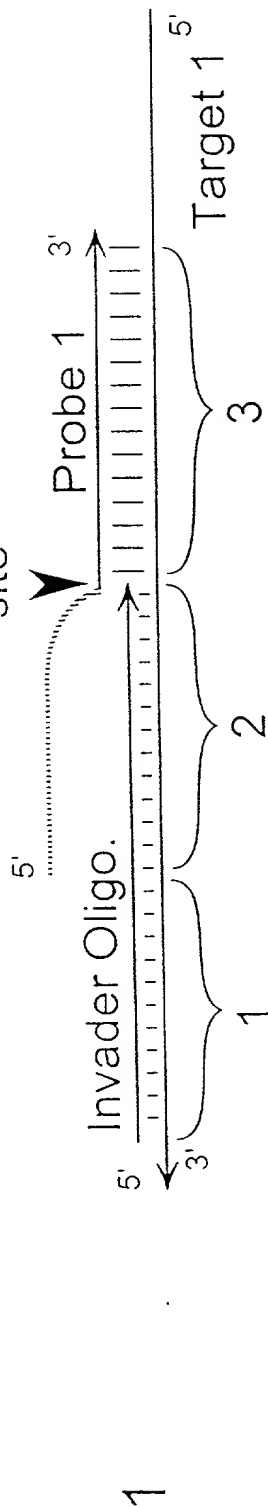


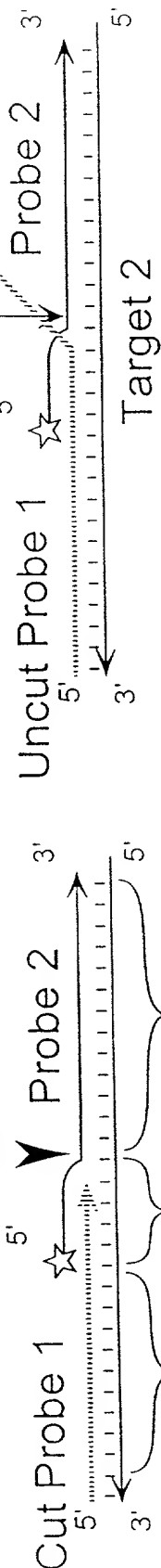
FIGURE 32

Cleavage site



Background cleavage site

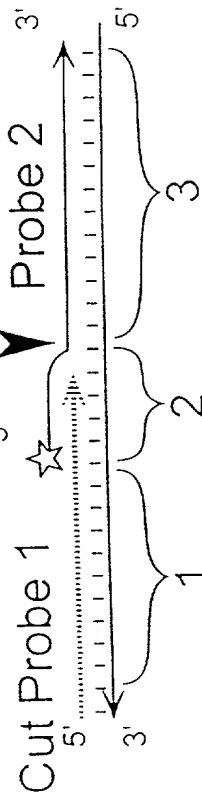
Cleavage site



2a

Cleavage site

Uncut Probe 1



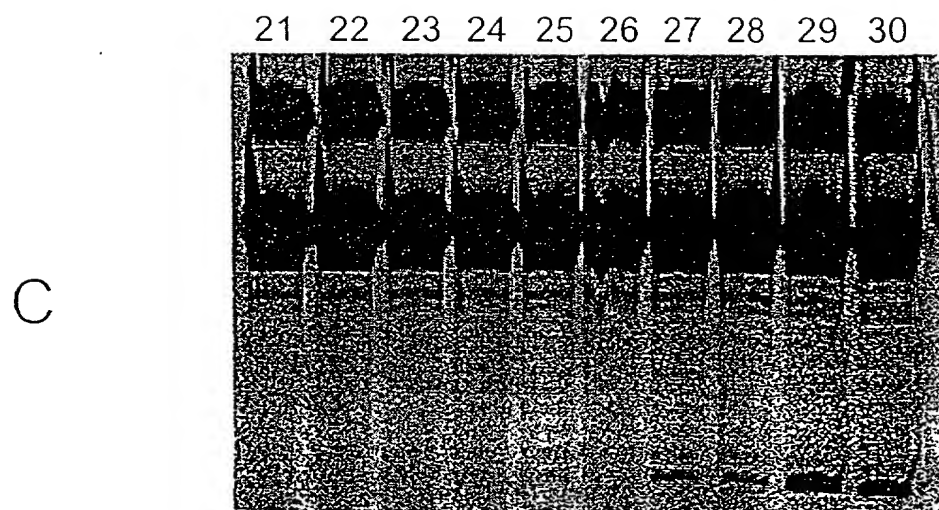
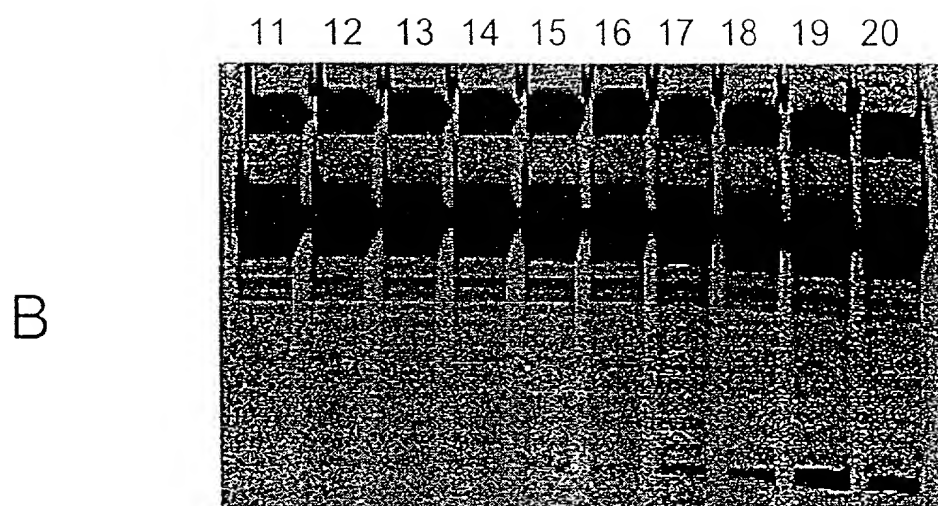
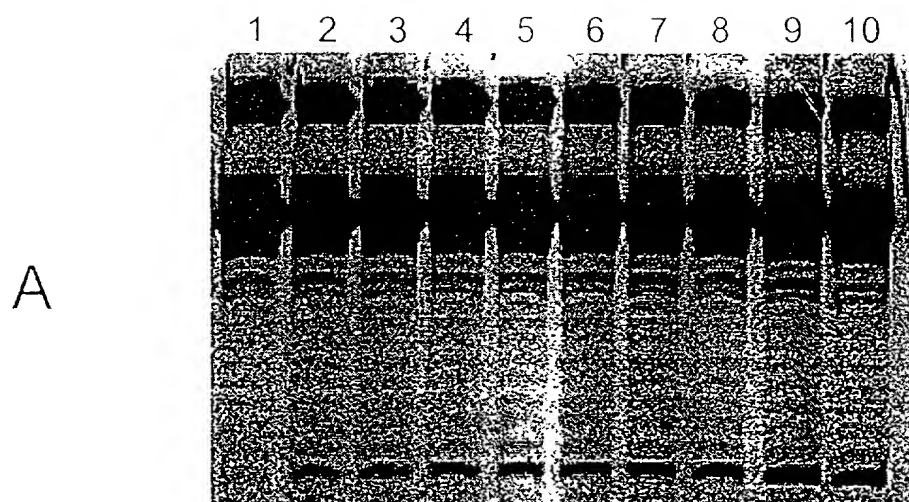
2b

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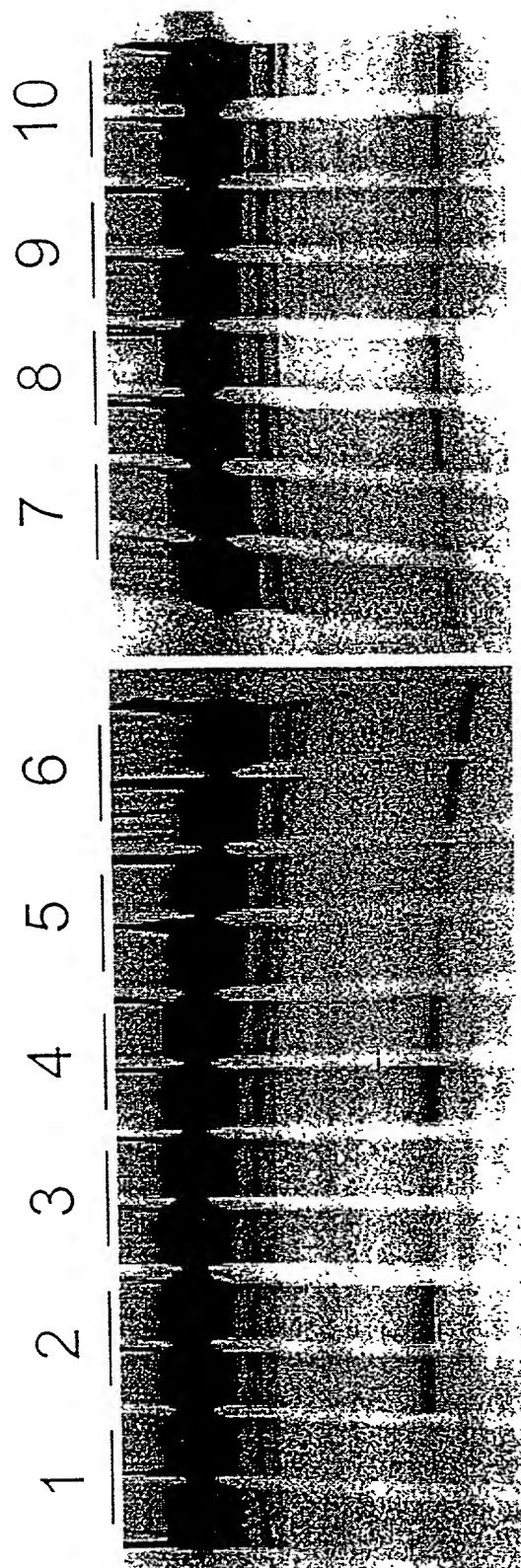
FIGURE 34



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T07250" 92449860

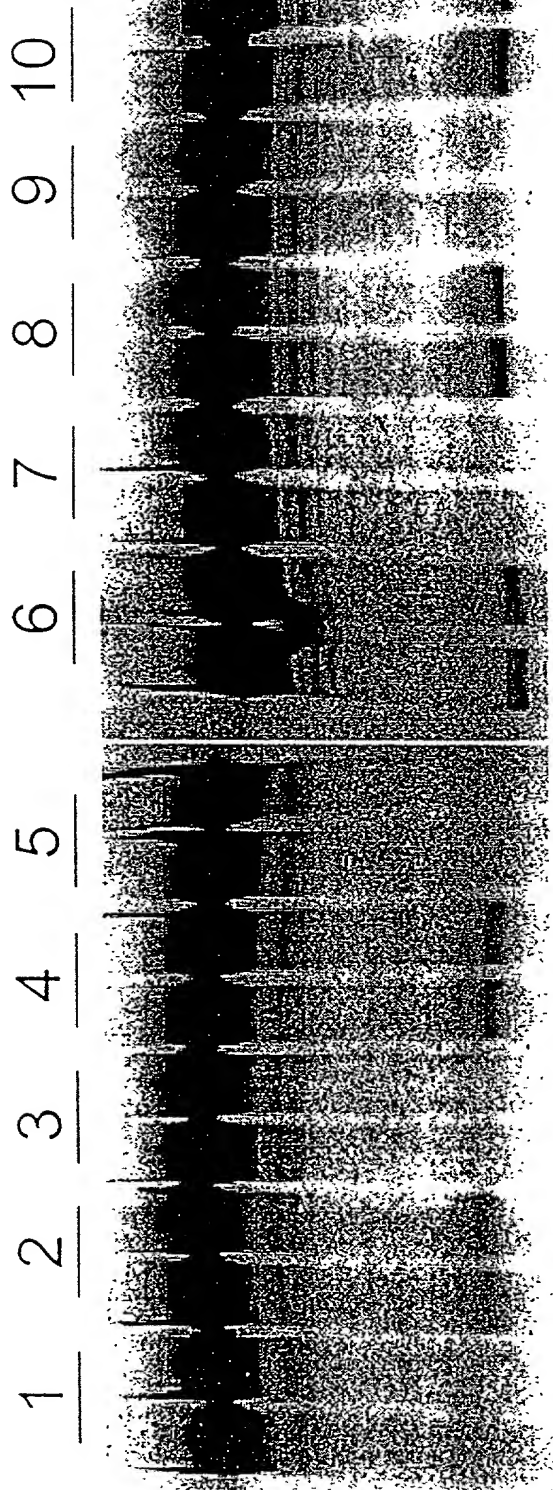
FIGURE 35A



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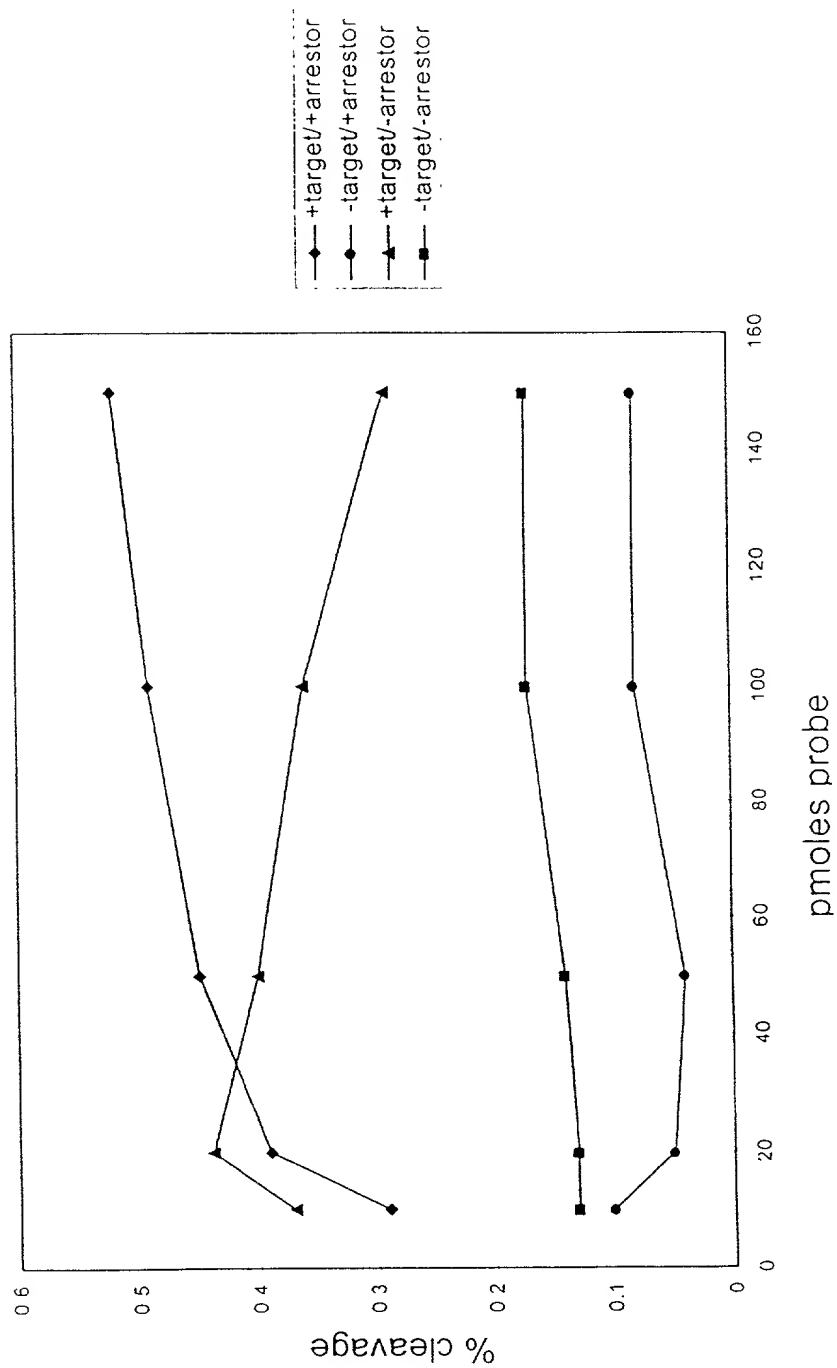
707250" 92449860

FIGURE 35B



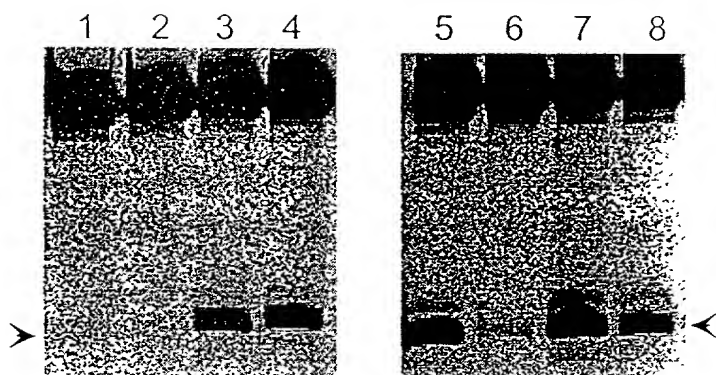
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FIGURE 35C



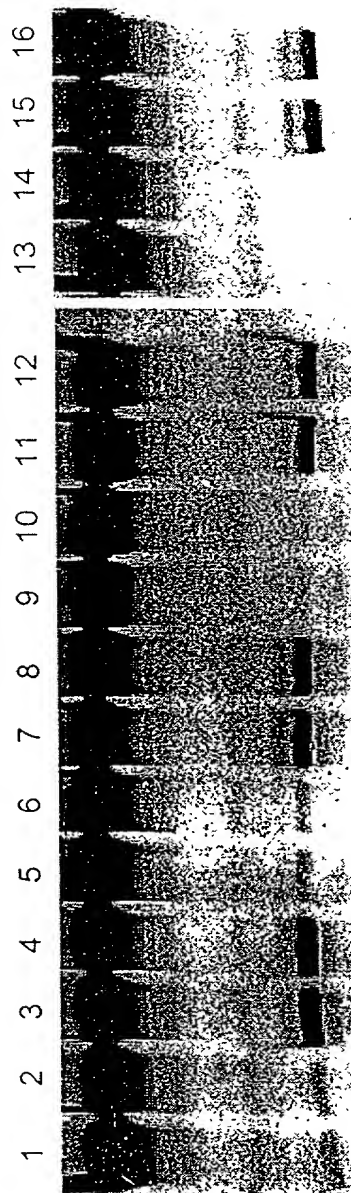
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FIGURE 36A



TON250" 92449860

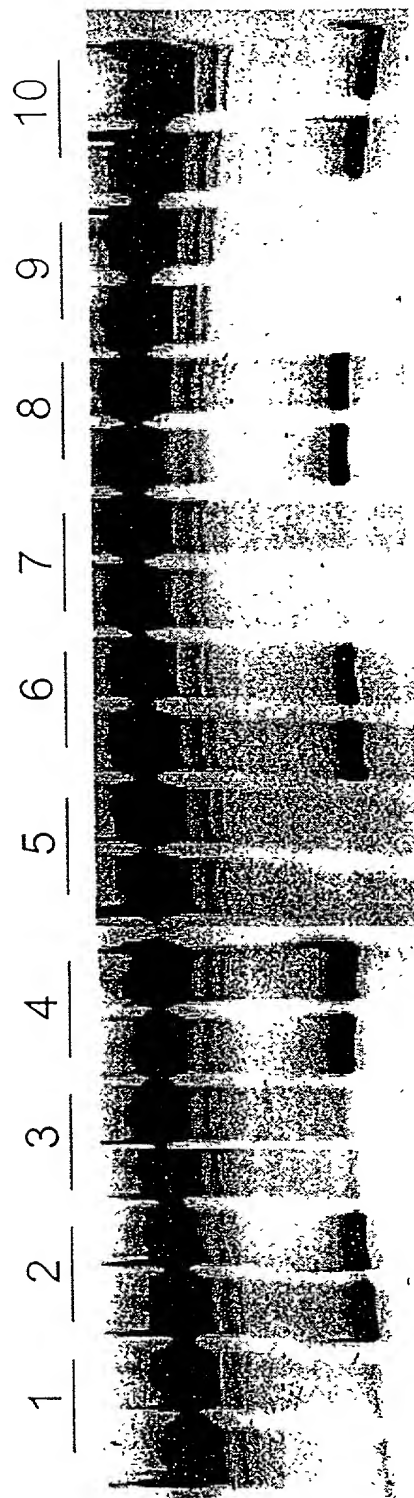
FIGURE 36B



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104250" 92449860

FIGURE 37A

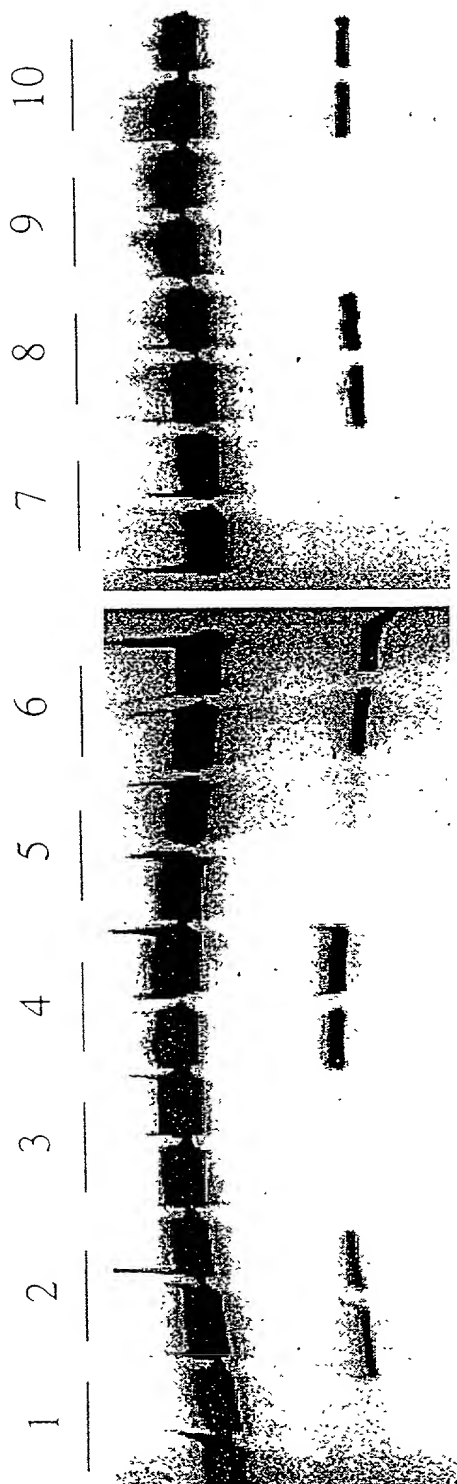


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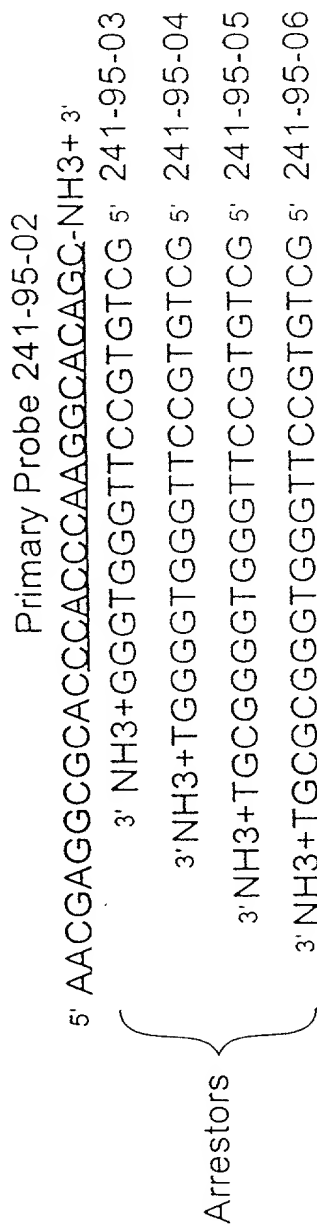
T04250" 92449860

FIGURE 37B



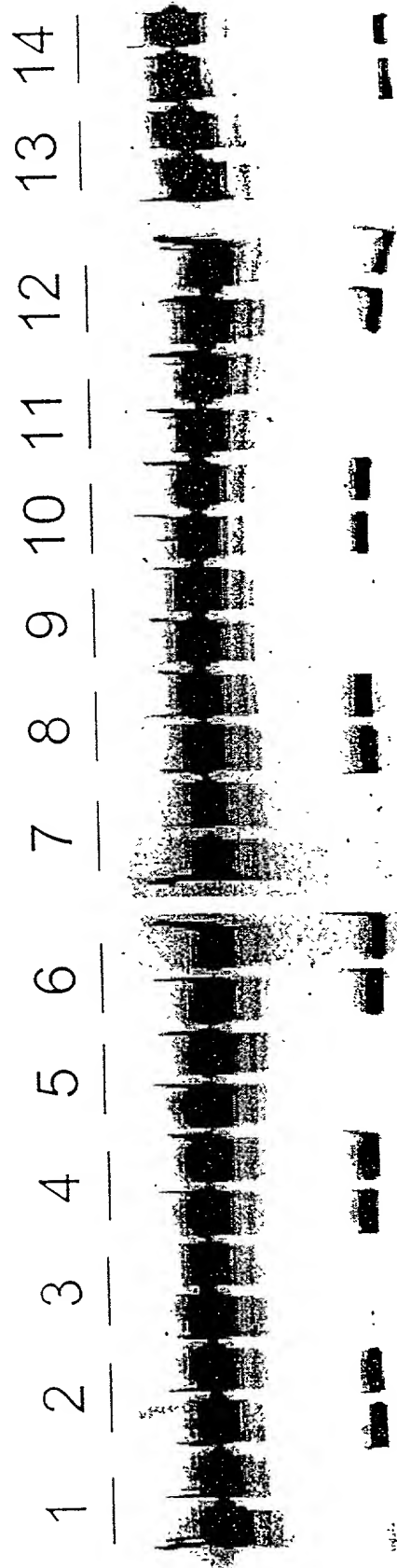
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FIGURE 37C



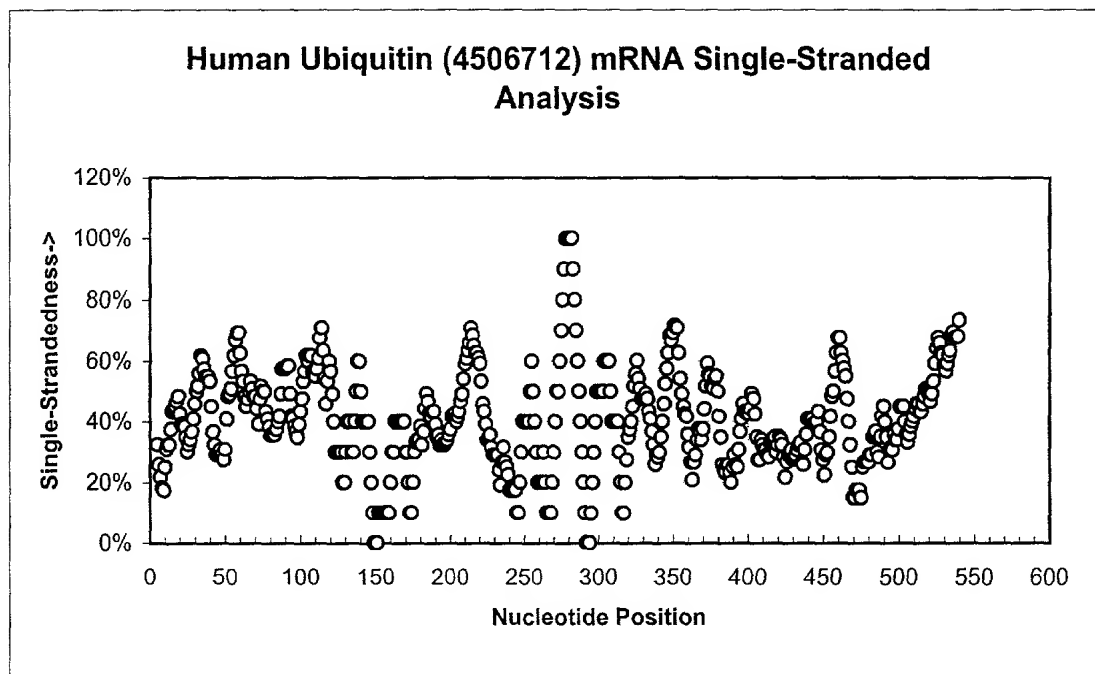
704250" 92449360

FIGURE 38



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Figure 39



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FIGURE 40

	1	2	3	4	5	6	7	8	9	10	11	12
A	Negative Control	No Target Control	Sample 1	Sample 1	Sample 9	Sample 9	Sample 17	Sample 17	Sample 25	Sample 25	Sample 33	Sample 33
B	No Target Control	No Target Control	Sample 2	Sample 2	Sample 10	Sample 10	Sample 18	Sample 18	Sample 26	Sample 26	Sample 34	Sample 34
C	Standard 1	Standard 1	Sample 3	Sample 3	Sample 11	Sample 11	Sample 19	Sample 19	Sample 27	Sample 27	Sample 35	Sample 35
D	Standard 2	Standard 2	Sample 4	Sample 4	Sample 12	Sample 12	Sample 20	Sample 20	Sample 28	Sample 28	Sample 36	Sample 36
E	Standard 3	Standard 3	Sample 5	Sample 5	Sample 13	Sample 13	Sample 21	Sample 21	Sample 29	Sample 29	Sample 37	Sample 37
F	Standard 4	Standard 4	Sample 6	Sample 6	Sample 14	Sample 14	Sample 22	Sample 22	Sample 30	Sample 30	Sample 38	Sample 38
G	Standard 5	Standard 5	Sample 7	Sample 7	Sample 15	Sample 15	Sample 23	Sample 23	Sample 31	Sample 31	Sample 39	Sample 39
H	Standard 6	Standard 6	Sample 8	Sample 8	Sample 16	Sample 16	Sample 24	Sample 24	Sample 32	Sample 32	Sample 40	Sample 40

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FIGURE 41

<b>hUbiquitin</b>	
Primary probe	5' -CGC CGA GAT CAC CTT TAC ATT TTC TAT CGT NH2-3' (SEQ ID NO:169)
INVADER oligonucleotide	5' -CCT TCC TTA TCC TGG ATC TTG GCA -3' (SEQ ID NO:170)
ARRESTOR oligonucleotide	5'-ACG ATA GAA AAT GTA AAG GTG ATC-3' (SEQ ID NO:171)
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3' (SEQ ID NO:172)
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3' (SEQ ID NO:173)
<b>m/r Ubiquitin, mouse (288C, 516C, 744C, 972C), rat (247C, 475C, 703C, 931C)</b>	
Primary probe	5'-CCG CCG AGA TCA CGG ATG TTG TAA TCA GAG A-NH2-3' (SEQ ID NO:174)
INVADER oligonucleotide 1	5'-GTG CAG GGT TGA CTC CTT CTC-3' (SEQ ID NO:175)
INVADER oligonucleotide 2	5'-GTG CAG GGT TGA CTC TTT CTC-3' (SEQ ID NO:176)
INVADER oligonucleotide 3	5'-GTG CAG GGT CGA CTC TTT CTC-3' (SEQ ID NO:177)
ARRESTOR oligonucleotide	5'-TCT CTG ATT ACA ACA TCC GTG ATC T-3' (SEQ ID NO:178)
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3' (SEQ ID NO:172)
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3' (SEQ ID NO:173)
<b>r/m GAPDH, rat (150C), mouse(166C)</b>	
Primary probe	5'-CGC CGA GAT CAC GTA GTT GAG GTC AAT GA-NH2-3' (SEQ ID NO:179)
INVADER oligonucleotide	5'-GAA TCA TAC TGG AAC ATG TAG ACC ATC-3' (SEQ ID NO:180)
ARRESTOR oligonucleotide	5'-TCA TTG ACC TCA ACT ACG TGA TCT-3' (SEQ ID NO:181)
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3' (SEQ ID NO:172)
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3' (SEQ ID NO:173)
<b>hGAPDH, 516C</b>	
Primary probe	5'-CCG CCG AGA TCA CGA TGA TCT TGA GGC T-NH2-3' (SEQ ID NO:182)
INVADER oligonucleotide	5'-TGG TGC AGG AGG CAT TGC TC-3' (SEQ ID NO:183)
ARRESTOR oligonucleotide	5'-CAG CCT CAA CAG TAC CCG GAT CT-3' (SEQ ID NO:184)
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3' (SEQ ID NO:172)
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3' (SEQ ID NO:173)

## hTGF-β

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTC CAC GGC TC -3'  
5'-AGG CGA AAG CCC TCA ATT TCC CA-3'  
5'-AAC CAC TGC CGC ACA-3'  
5'-GAG CCG TGG AGG AGG CG-3'  
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:185)  
(SEQ ID NO:186)  
(SEQ ID NO:187)  
(SEQ ID NO:188)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## hMCP-1

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTT CGG AGT TTG GG NH2 -3"  
5'-GGG TTG TGG AGT GAG TGT TCA AGT A -3'  
NO STACKER  
5'-GGG-AAA-CTC-CGA-AGG-AGG-CG-3'  
5'-FL-CAC-Z28-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:191)  
(SEQ ID NO:192)  
(SEQ ID NO:193)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## hTNF-α

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC TCT GAC TGC CA NH2-3'  
5'-TTG TCA CTC GGG GTT CGA GAA GAT GAA-3'  
5'-GGG CCA GAG GG-3'  
5'-AGG CAG TCA GAG AGG CG-3'  
5'-FL-CAC-Z28-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:194)  
(SEQ ID NO:195)  
(SEQ ID NO:196)  
(SEQ ID NO:197)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## hIL-6

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTC ATT GAA TTNH2-3'  
5'-CCA AAA GTC CAG TGA TTT TCA CCA GGC AAG TA -3'  
5'-CAG ATT GGA AGC ATC CAT CT-3'  
5'-GAT TCA ATG AGG AGG AGG C-3'  
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:198)  
(SEQ ID NO:199)  
(SEQ ID NO:200)  
(SEQ ID NO:201)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

### hIL-1 $\beta$

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CAT CTG TTT AGG NH2-3'  
5'-CAG GTC CTG GAA GGA GCA CTT A-3'  
5'-GCC ATC AGC TTC TTT GTT CTT GTC ATC-3'  
5'-GCC CTA AAC AGA TGG AGG CG-3'  
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:202)  
(SEQ ID NO:203)  
(SEQ ID NO:204)  
(SEQ ID NO:205)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

### hIL-2

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTC CAG TTG TAG NH2 -3'  
5'-AAA ATC ATC TGT AAA TCC AGC AGT AAA TGA -3'  
5'-CTG TGT TTT CTT TGT AGA AC -3'  
5' CTA CAA CTG GAG GAG GC -3'  
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:206)  
(SEQ ID NO:207)  
(SEQ ID NO:208)  
(SEQ ID NO:209)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

### hIL-8

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTC TCA GTT CT-NH2-3'  
5'-GTG TGG TCC ACT CTC AAT CAA -3'  
5'-TTG ATA AAT TTG GGG TGG AAA GGT TTG GA-3'  
5'-AGA ACT GAG AGG AGG CG-3'  
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:210)  
(SEQ ID NO:211)  
(SEQ ID NO:619)  
(SEQ ID NO:620)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

### hIL-10

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CAA ACT CAC TCA T-NH2-3'  
5'-GTC ATG TAG GCT TCT ATG TAG TTG ATG AAG ATG TA-3'  
5'-GGC TTT GTA GAT GCC TTT CTC TTG GA-3'  
5'-ATG AGT GAG TTT GGT GCG-3'  
5'-FL-CAC (Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:621)  
(SEQ ID NO:622)  
(SEQ ID NO:623)  
(SEQ ID NO:624)  
(SEQ ID NO:189)  
(SEQ ID NO:625)



# hIL-4

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CTT GGA GGC A-NH2-3'  
5'-AAG GTT TCC TTC TCA GTT GTG TTA-3'  
5'-GCA AAG ATG TCT GTT ACG GTC AAC TC-3'  
5'-TGC CTC CAA GGT GCG C-3'  
5'-FL-CAC (Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:626)  
(SEQ ID NO:627)  
(SEQ ID NO:628)  
(SEQ ID NO:629)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

# hIFN-γ

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CTT CAA AAT GCC TAA-NH2-3'  
5'-TGT CAC TCT CCT CTT TCC AAT TA-3'  
5'-GAA AAG AGT TCC ATT ATC CGC TAC ATC TG-3'  
5'-TTA GGC ATT TTG AAG GTG CGC-3'  
5'-FL-CAC (Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:630)  
(SEQ ID NO:631)  
(SEQ ID NO:632)  
(SEQ ID NO:633)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

## hCYP 1A2, 1193G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CGT TGT GTC CC-NH2-3'  
5'-GGG ATG TAG AAG CCA TTC AGA-3'  
5'-TTG TTG TGC TGT GGG GGA TG-3'  
5'-GGG ACA CAA CGG TGC GC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:634)  
(SEQ ID NO:635)  
(SEQ ID NO:636)  
(SEQ ID NO:637)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

## hCYP 2B6, 343G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CAC CAT ATC CC-NH2-3'  
5'-CCA GCG GTT TCC ATT GGC AAA GAT CAA-3'  
5'-CGG AAG AAT GGG TCG ACC ATG-3'  
5'-GGG ATA TGG TGG AGG CG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:638)  
(SEQ ID NO:639)  
(SEQ ID NO:640)  
(SEQ ID NO:641)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## hCYP 2C19, 223G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CGT TCC AGG C-NH2-3'  
5'-CAT ATC CAT GCA GCA CCA CCA TGA-3'  
5'-CAA AAT ACA GAG TGA ACA CAG GGC C-3'  
5'-GCC TGG AAC GGT GCG C-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:642)  
(SEQ ID NO:643)  
(SEQ ID NO:644)  
(SEQ ID NO:645)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

## hCYP 2C9, 1554T

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC ATG GAT AAT GCC C-NH2-3'  
5'-CAG GTG AGA AAA GGC ATT ACA GAT AGT GAA AGC-3'  
5'-CAG AGG AAA GAG AGC TGC AGG G-3'  
5'-GGG CAT TAT CCA TGA GGC G-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:646)  
(SEQ ID NO:647)  
(SEQ ID NO:648)  
(SEQ ID NO:649)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## hCYP 2D6, 1316G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CCT GCT GAG AAA-NH2-3'  
5'-CCC GAG GCA TGC ACG GCG GA-3'  
5'-GGC AGG AAG GCC TCC-3'  
5'-TTT CTC AGC AGG GAG GCG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:650)  
(SEQ ID NO:651)  
(SEQ ID NO:652)  
(SEQ ID NO:653)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## hCYP 3A4, 309C

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC GCC CCA CA-NH2-3'  
5'-CAG CAC AGG CTG TTG ACC ATC ATA AAA C-3'  
5'-CTT TTC CAT ACT TTT TAT GAC ATT C-3'  
5'-TGT GGG GCG AGG CG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:654)  
(SEQ ID NO:655)  
(SEQ ID NO:656)  
(SEQ ID NO:657)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## hCYP 3A5 v2, 323T

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC AGT TGA CCT TC-NH2-3'  
5'-GTG ATG GCC AGC ACA GGG C-3'  
5'-ATA CGT TCC CCA CAT TTT TC-3'  
5'-TGA AGG TCA ACT GTG CGC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:658)  
(SEQ ID NO:659)  
(SEQ ID NO:660)  
(SEQ ID NO:661)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

## hCYP 3A7, 231C

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC GTC ATA AAT ACC CC-NH2-3'  
5'-GCC AGC ATA GGC TGT TGA CAC-3'  
5'-AGA CTT TTC TAT ACT TTT TAT AAC ATT C-3'  
5'-GGG GTA TTT ATG ACG TGC GC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:662)  
(SEQ ID NO:663)  
(SEQ ID NO:664)  
(SEQ ID NO:665)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

# h/rCYP 1A1 (human: 937, rat 863G)

Primary probe  
INVADER oligonucleotide (h)  
INVADER oligonucleotide (r)  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTG TCT GTG AT-NH2-3'  
5'-TCC TGA CAG TGC TCA ATC AGG A-3'  
5'-TCC TGA CAA TGC TCA ATG AGG A-3'  
5'-GTC CCG GAT GTG GCC C-3'  
5'-ATC ACA GAC AGG AGG CG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:666)  
(SEQ ID NO:667)  
(SEQ ID NO:668)  
(SEQ ID NO:669)  
(SEQ ID NO:670)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

# h/rCYP 1A2 (813C/819C)

Primary probe  
INVADER oligonucleotide (h)  
INVADER oligonucleotide (r)  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC GGA CTG TTT TCT GC-NH2-3'  
5'-CTT GTC AAA GTC CTG ATA GTG CTC CTC-3'  
5'-CTT GTT GAA GTC TTG ATA GTG TTC CTC-3'  
5'-GCA GAA AAC AGT CCG TGC GC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:671)  
(SEQ ID NO:672)  
(SEQ ID NO:673)  
(SEQ ID NO:674)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

# rCYP 2B1, 1017T

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC ACT GCG GTC AT-NH2-3'  
5'-GTG GAT AAC TGC ATC AGT GTA TGG CAT TTT C-3'  
5'-CAA GGG TTG GTA GCC TGT GTG AGC C-3'  
5'-ATG ACC GCA GTG AGG CG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:675)  
(SEQ ID NO:676)  
(SEQ ID NO:677)  
(SEQ ID NO:678)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

# rCYP 2B2, 162T

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC AGA GCC AAT CAC-NH2-3'  
5'-CGA TCA TCA AGG GAT GGT GGC CTG TGC-3'  
5'-CTG ATC AAT CTC CTT TTG GAC TTT CTC TGC G-3'  
5'-GTG ATT GGC TCT GAG GCG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:679)  
(SEQ ID NO:680)  
(SEQ ID NO:681)  
(SEQ ID NO:682)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## rCYP 2E1, 969G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTC AAT TTC TG-NH2-3'  
5'-CCC TGT CAA TTT CTT CAT GAA GTT TA-3'  
5'-GGT ATT TCA TGA GGA TCA GGA GC-3'  
5'-CAG AAA TTG AAG AGG AGG CG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:683)  
(SEQ ID NO:684)  
(SEQ ID NO:685)  
(SEQ ID NO:686)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## rCYP 3A1, 164G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CCG GTC CCA-NH2-3'  
5'-TCC CCT GTT TCT TGA AAA GTC CAT GTG TGA-3'  
5'-AAT CCG TAG AGG AGC ACC AGG-3'  
5'-TGG GAC CCG GTG CGC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:687)  
(SEQ ID NO:688)  
(SEQ ID NO:689)  
(SEQ ID NO:690)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

## rCYP 3A2, 1091G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTC GGC AGG-NH2-3'  
5'-CAC AAT ATC GTA GGT AGG AGG TGC CTT AA-3'  
5'-GCC CCA TCG ATC TCC TCC-3'  
5'-CCT GCC GAG GAG GCG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:691)  
(SEQ ID NO:692)  
(SEQ ID NO:693)  
(SEQ ID NO:694)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## rCYP 4A1, 296A

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC TAG GCT TTG CT-NH2-3'  
5'-TTC ATG TAG TCA GGG TCA TAG ACA ATT AAG A-3'  
5'-TCC CCA GAA CCA TCG AGG AAA GG-3'  
5'-AGC AAA GCC TAG TGC GC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:695)  
(SEQ ID NO:696)  
(SEQ ID NO:697)  
(SEQ ID NO:698)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

## rCYP 4A2

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC AGA AGG CCC CTT-NH2-3'  
5'-CCT TGA ACA GCA CCA GAA ATA GAC TGA GCA C-3'  
5'-GGA AGA ACC CAG AGA CAC CAT CC-3'  
5'-AAG GGG CCT TCT GTG CGC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:699)  
(SEQ ID NO:700)  
(SEQ ID NO:701)  
(SEQ ID NO:702)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

## rCYP 4A3, 1235C

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC GTT GTG ATA CCT T-NH2-3'  
5'-GAT GAA GGC CAT AAA TTA AAA TTG TGC-3'  
5'-TGG GTA TGG AAC GTC C-3'  
5'-AAG GTA TCA CAA CGT GCG C-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:703)  
(SEQ ID NO:704)  
(SEQ ID NO:705)  
(SEQ ID NO:706)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

Figure 42

The screenshot shows a web browser window titled "InvaderCreator - Microsoft Internet Explorer". The address bar displays "http://localhost/InvaderCreator.html". The page content includes a form with the following fields and controls:

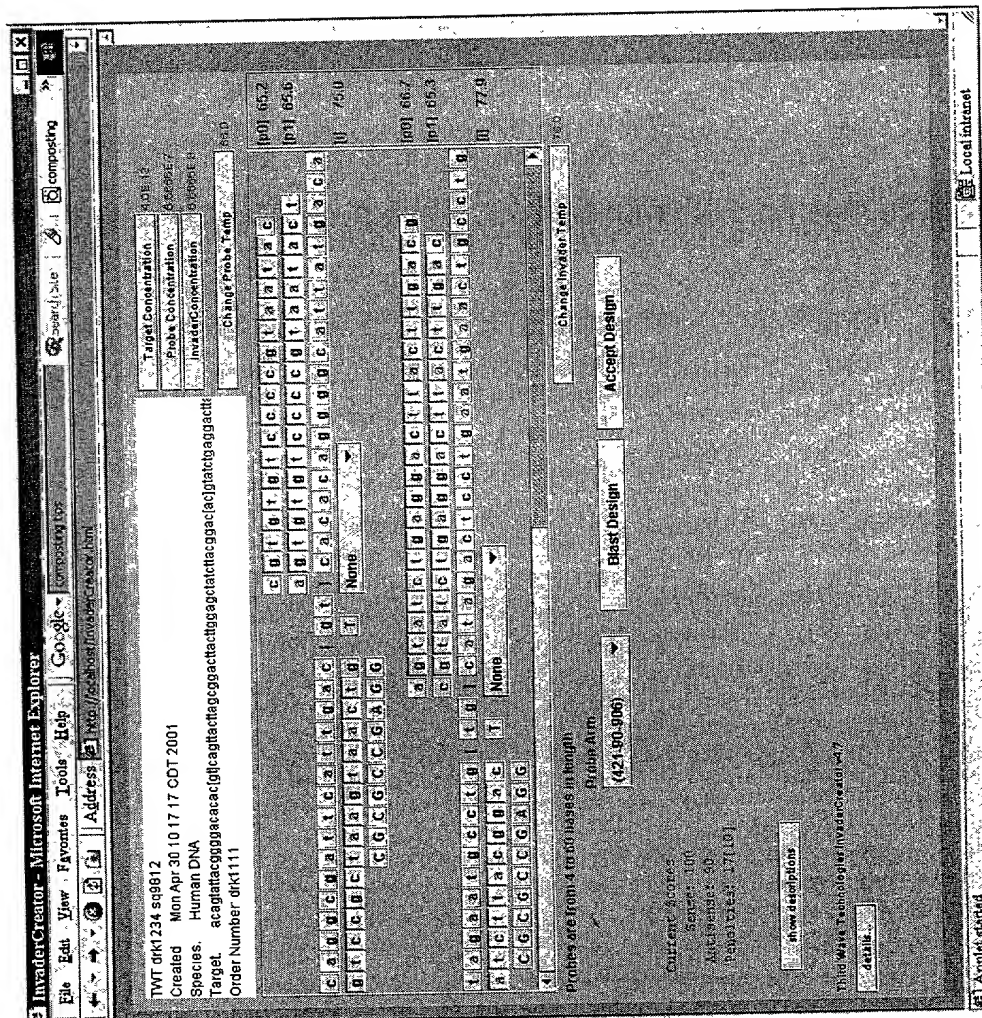
- User Name**: A text input field.
- Sequence Number**: A text input field.
- Target Sequence**: A text input field.
- Order Number**: A text input field.
- Species**: A dropdown menu with "Human" selected.
- DNA/RNA**: Radio buttons for "DNA" (selected) and "RNA".
- Multiplexed Design**: A checkbox.
- Go Design It**: A button.
- Details**: A button.

At the bottom of the page, it says "Third Wave Technologies InvaderCreator v3.7". The status bar at the bottom of the browser window indicates "Applied started" and "Local intranet".





Figure 44



## Figure 45

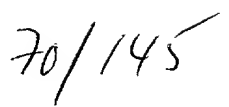
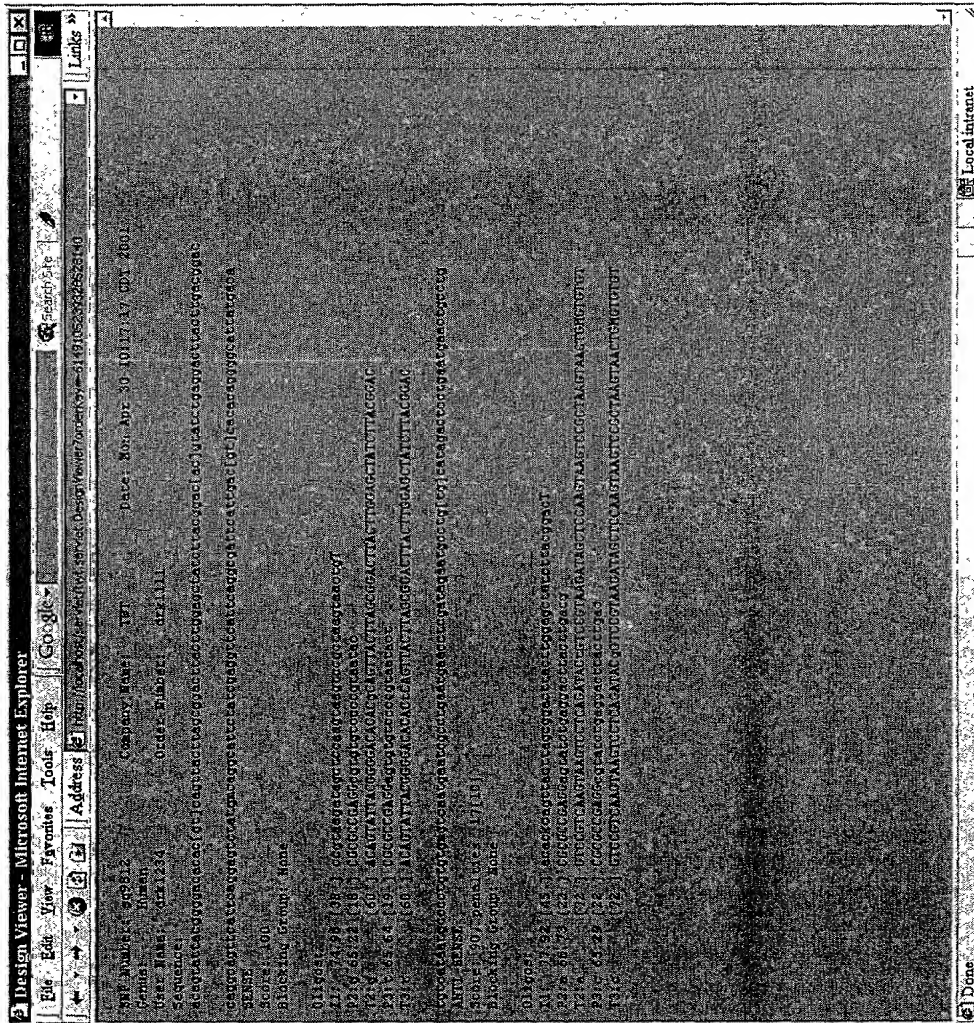


Figure 46



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# FIGURE 47

Oligo sequence descriptions: 5' to 3' direction, 2'-Ome nts are bolded and underlined, internal modifications defined in ( )

Oligo Type	Oligo Sequence (5' to 3')	Modification	SEQ ID NO
hTNF- $\alpha$			
probe	cgg ccg aga tca ctc tga ctg cct NH2	3' Amine	709
invader	tig tca ctc ggg gtt cga gaa gat gaa		710
stacker	<u>ggg cca gag ggc tga tta g</u>	<u>all 2'Ome bases</u>	711
stacker	<u>ggg cca gag ggc tga tta</u>	<u>all 2'Ome bases</u>	712
stacker	<u>ggg cca gag ggc tg at</u>	<u>all 2'Ome bases</u>	713
stacker	<u>ggg cca gag ggc t</u>	<u>all 2'Ome bases</u>	714
stacker	<u>ggg cca gag gg</u>	<u>all 2'Ome bases</u>	715
arrestor	<u>agg cag tca gag tga tc</u>	<u>all 2'Ome bases</u>	716
arrestor	<u>agg cag tca gag tga tct c</u>	<u>all 2'Ome bases</u>	717
SRT	cggagaagcagttggtgatctcgccgNH2		718
FRET probe	Fcaac(Cy3)gcttcctccg	3' Amine	719
probe	cgg tca cgc ctc tct gac tgc ct NH2	3' Amine	720
invader	tig tca ctc ggg gtt cga gaa gat gaa		721
stacker	<u>ggg cca gag ggc tga tta g</u>	<u>all 2'Ome bases</u>	722
arrestor	<u>agg cag tca gag agg cg</u>	<u>all 2'Ome bases</u>	723
SRT	cggagaagcagttggtgatctcgccgNH2	3'base 2'Ome, 3'Amine	724
FRET probe	Fcaac(Cy3)gcttcctccg		725
probe	cgg tca cgc ctc tct gac tgc ctg gNH2	3' Amine	726
invader	tig tca ctc ggg gtt cga gaa gat gaa		727
arrestor	<u>cca ggc agt cag aga ggc g</u>	<u>all 2'Ome bases</u>	728
SRT	cggagaagcagttggtgatctcgccgNH2	3'base 2'Ome, 3'Amine	729
FRET probe	Fcaac(Cy3)gcttcctccg		730
probe	cgg ccg aga tca ctc tga ctg cc NH2	3' Amine	731
invader	tig tca ctc ggg gtt cga gaa gat gaa		732
stacker	<u>tgg gcc aga ggg ctg att a</u>	<u>all 2'Ome bases</u>	733
arrestor	<u>agg cag tca gag tga tc</u>	<u>all 2'Ome bases</u>	734
SRT	cggagaagcagttggtgatctcgccgNH2	3' Amine	735
FRET probe	Fcaac(Cy3)gcttcctccg		736
probe	cgg ccg aga tca ctg atc tga ctg NH2	3' Amine	737
invader	ctt gtc act cgg ggt tgg aga aga c		738

stacker	<u>cct ggg cca gag ggc tga tt</u>	all 2'Ome bases	739
arrestor	<u>cag tca gat cag tga tc</u>	all 2'Ome bases	740
SRT	cggaagaagcagttggtgatctcgccgNH2	3' Amine	741
FRET probe	Fcaac(Cy3)gcttctccg		742
probe	ccg tca cgc ctc tct gac tgc ca NH2	3' Amine	743
probe	ccg tca cgc ctc tct gac tgc cg NH2	3' Amine	744
probe	ccg tca cgc ctc tct gac ggc ct NH2	3' Amine	745
probe	ccg tca cgc ctc tct gac agc ct NH2	3' Amine	746
invader	ttg tca ctc ggg gtt cga gaa gat gaa		747
stacker	<u>ggg cca gag gg</u>	all 2'Ome bases	748
arrestor	<u>agg cag tca gag agg cg</u>	all 2'Ome bases	749
arrestor	<u>agg ccg tca gag agg cg</u>	all 2'Ome bases	750
arrestor	<u>agg ctg tca gag agg cg</u>	all 2'Ome bases	751
SRT	ccaggaagcaagtggagcggtgacggu	3' 3bases 2'Ome	752
FRET probe	Fcaac(Z21)tgctctg		753
probe	ccg ccg aga tca ctc tga tgc ctg gg NH2	3' Amine	754
invader	ctt gtc act cgg ggt tgc aga aga tga a		755
arrestor	<u>ccc agg cag tca gag tga tcNH2</u>	all 2'Ome bases, 3' Amine	756
SRT	cggaagaagcagttggtgatctcgccgNH2	3' 2 last base 2' Ome, 3' Amine	757
FRET probe	Fcaac(Cy3)gcttctccg		758
hIL-1 $\beta$			
probe	ccg tca cgc ctc cat ctg tt agg g NH2	3' Amine	759
invader	cag gtc ctg gaa gga gca ctt a		760
stacker	<u>cca tca gct tct ttg ttc ttg tca tc</u>	all 2'Ome bases	761
arrestor	<u>gcc cta aac aga tgg agg cg</u>	all 2'Ome bases	762
SRT	cggaagaagcagttgagcggtgacggtNH2	3'base 2'Ome, 3'Amine	763
FRET probe	Fcaac(Cy3)gcttctccg		764
probe	ccg tca cgc ctc cat ctg tt agg gc NH2	3' Amine	765
invader	cag gtc ctg gaa gga gca ctt a		766
stacker	<u>cat cag ctt ctt tgt tct tgt cat cc</u>	all 2'Ome bases	767
arrestor	<u>gcc cta aac aga tgg agg cg</u>	all 2'Ome bases	768
SRT	cggaagaagcagttgagcggtgacggtNH2	3'base 2'Ome, 3'Amine	769
FRET probe	Fcaac(Cy3)gcttctccg		770
probe	ccg tca cgc ctc cat ctg tt agg NH2	3' Amine	771

invader	cag gtc ctg gaa gga gca ctt a		
stacker	<b>gcc atc agc ttc ttt gtt ctt gtc atc</b>	<b>all 2'Ome bases</b>	772
SRT	cggagaagcagtgaggcgtagcggtNH2	3'base <b>2'Ome</b> , 3'Amine	773
FRET probe	Fcaac(Cy3)gcttctccg		774
			775
probe	ccg tca cgc ctc cca tca gct tcNH2	3' Amine	776
invader	gag cac ttc atc tgt tta ggg a		777
stacker	<b>ttt gtt ctt gtc atc ctc att gcc ac</b>	<b>all 2'Ome bases</b>	778
arrestor	<b>gaa gct gat ggg agg cg</b>	<b>all 2'Ome bases</b>	779
SRT	cggagaagcagtgaggcgtagcggtNH2	3'base <b>2'Ome</b> , 3'Amine	780
FRET probe	Fcaac(Cy3)gcttctccg		781
probe	ccgcgagatcactcatctgttttagggccNH2	3' Amine	782
probe	ccgcgagatcactcatctgttttagggcNH2	3' Amine	783
invader	caggctcctggaaggagcacta		784
arrestor	<b>ggccctaaacagatgagtcNH2</b>	<b>all 2'Ome bases, 3' Amine</b>	785
SRT	cggagaagcagtggtgacatcgcggcgNH2	3' 2 last base <b>2' Ome</b> , 3' Amine	786
FRET probe	Fcaac(Cy3)gcttctccg		787

<b>hcFOS</b>			
probe	ccg tca cgc ctc cag cag gtt ggc NH2	3' Amine	788
invader	gct tga ccc agg gag gg		789
arrestor	<b>gcc aag gtg ctg gag gcg</b>	<b>all 2'Ome bases</b>	790
SRT	cggagaagcagtgaggcgtagcggtNH2	3'base <b>2'Ome</b> , 3'Amine	791
FRET probe	Fcaac(Cy3)gcttctccg		792
probe	ccg tca cgc ctc cag cag gtt gg NH2	3' Amine	793
invader	gct tga ccc agg gag gg		794
stacker	<b>caa tct cgg tct gca aag cag ac</b>	<b>all 2'Ome bases</b>	795
arrestor	<b>gcc aag gtg ctg gag gcg</b>	<b>all 2'Ome bases</b>	796
SRT	cggagaagcagtgaggcgtagcggtNH2	3'base <b>2'Ome</b> , 3'Amine	797
FRET probe	Fcaac(Cy3)gcttctccg		798
probe	ccg tca cgc ctc tca gca ggt tgg NH2	3' Amine	799
invader	act cia gtt ttt cct tct cct a		800
stacker	<b>caa tct cgg tct gca aag cag ac</b>	<b>all 2'Ome bases</b>	801
arrestor	<b>cca acc tgc tga gag gcg</b>	<b>all 2'Ome bases</b>	802
SRT	cggagaagcagtgaggcgtagcggtNH2	3'base <b>2'Ome</b> , 3'Amine	803
FRET probe	Fcaac(Cy3)gcttctccg		804

# hIL-6

probe ccg cgg aga tca ctc tcc tca ttg aat cct NH2  
 probe ccg cgg aga tca ctc tcc tca ttg aat ccNH2  
 invader cca aaa gtc cag tga tga ttt tca cca ggc aag a  
 arrestor **agg att caa tga gga aga gtc atc tNH2**  
 SRT cggaggaagcagttggtgatctcggcgNH2  
 FRET probe Fcaac(Cy3)gcttctccg

3' Amine  
 3' Amine  
 all 2'Ome bases, 3' Amine  
 3' 2 last base 2'Ome, 3' Amine

# probe

invader ccg tca cgc ctc ctc ctc att gaNH2  
 stacker cca gtc atg att ttc acc agg caa gta  
 arrestor **tcc aga ttg gaa gca tcc atc t**  
 SRT **ttc aat gag gag gag gc**  
 FRET probe cggagaagcagttgaggcgtgacggtNH2  
 Fcaac(Cy3)gcttctccg

3' Amine  
 all 2'Ome bases  
 all 2'Ome bases  
 3'base 2'Ome, 3'Amine

# probe

invader ccg tca cgc ctc ctc ctc att gaNH2  
 stacker cca gtc atg att ttc acc agg caa gta  
 arrestor **atc cag att gga agc atc cat ct**  
 SRT **ttc aat gag gag gag gc**  
 FRET probe cggagaagcagttgaggcgtgacggtNH2  
 Fcaac(Cy3)gcttctccg

3' Amine  
 all 2'Ome bases  
 all 2'Ome bases  
 3'base 2'Ome, 3'Amine

# probe

probe ccg tca cgc ctc ctc ctc att gaa tgNH2  
 probe ccg tca cgc ctc ctc ctc att gaa taNH2  
 probe ccg tca cgc ctc ctc ctc att gaa ttNH2  
 invader cca aaa gtc cag tga tga ttt tca cca ggc aag ta  
 stacker **cagattggaagcatccatct**  
 arrestor **gattcaatgaggaggaggc**  
 SRT ccaggaagcaagtgaggcgtgacggu  
 FRET probe Fcaac(Z21)tgcttcgtgg

3' Amine  
 3' Amine  
 3' Amine  
 all 2'Ome bases  
 all 2'Ome bases  
 3' 3bases 2'Ome

# hMCP-1

probe ccg tca cgc ctc ctt cgg agt ttg gtNH2  
 probe ccg tca cgc ctc ctt cgg agt ttg gt NH2  
 invader ggg ttg tgg agt gag tgt tca agt a  
 arrestor **aac cca aac tcc gaa ggc ggc gtc gNH2**  
 SRT cggagaagcagttgaggcgtgacggtNH2

3' Amine  
 3' Amine  
 all 2'Ome bases  
 3'base 2'Ome, 3'Amine



FRET probe	Fcaac(Cy3)gcttctccg	836
probe	gcc gtc acg cct ctt tgg gtt tgc ttg tc NH2	837
probe	gcc gtc acg cct ctt tgg gtt tgc ttg tNH2	838
Invader	tggagtgaagtgttcaagtcctcgaga	839
arrestor	<b>gacaagcaaacccaaagagcg</b>	840
SRT	cggaagaagcagttggaggcgtagcgcgNH2	841
FRET probe	Fcaac(Cy3)gcttctccg	842
probe	cct gtc tgc ctg cct tgc gag ttt ggg	843
probe	cct gtc tgc ctg cct tgc gag ttt gg	844
invader	ggg ttg tgg agt gag tgt tca agt a	845
arrestor	<b>ccc aaa ctc cga agg cag cg</b>	846
SRT	cggaggaagcagttggcagcgagacagNH2	847
SRT	cggaggaagcagttggcagcgagac(Amino dA)gNH2	848
SRT	cggaggaagcagttggcagcg(Amino dA)gacgNH2	849
SRT	cggaggaagcagttggc(Amino dA)gagacagNH2	850
SRT	cggaggaagcagttggcagcg(Amino dA)gac(Amino dA)gNH2	851
SRT	cggaggaagcagttggc(Amino dA)gagagac(Amino dA)gNH2	852
SRT	cggaggaagcagttggc(Amino dA)gag(Amino dA)gacagNH2	853
FRET probe	Fcaac(Cy3)gcttctccg	854
probe	gcc gtc acg cct ctg gga cac ttg ctg cNH2	855
invader	gcc aca atg gtc ttg aag atc aca gct tct ta	856
arrestor	<b>gca gca agt gtc cca gag gcg NH2</b>	857
SRT	cggaagaagcagttggaggcgtagcgcgNH2	858
FRET probe	Fcaac(Cy3)gcttctccg	859
probe	ccg tca cgc ctc ctt cgg agt ttg gg NH2	860
invader	ggg ttg tgg agt gag tgt tca agt a	861
arrestor	<b>5'-ggg-aaa-ctc-cga-agg-agg-cg-3'</b>	862
SRT	ccaggaagcaagtggaggcgtagcgcggu	863
FRET probe	Fcac(Z21)tgcttcgtgg	864
probe	cgc cga gat cac ctt cgg agt ttg ggNH2	865
invader	ggg ttg tgg agt gag tgt tca agt a	866
arrestor	<b>ccc aaa ctc cga agg tga tc</b>	867
SRT	cggaagaagcagttgtagtcgagcgNH2	868
FRET probe	Fcaac(Cy3)gcttctccg	869

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probe	aac gag gcg cac ctt cgg agt ttg gg NH2	870
invader	ggg ttg tgg agt gag tgt tca agt a	871
arrestor	<b>ccc aaa ctc cga agg tgc g</b>	872
SRT	cggaagaagcagttgtgcgcctcgttaanNH2	873
FRET probe	Fcaac(Cy3)gcttcctccg	874
probe	ccg tca cgc ctc ctt cgg agt ttg g NH2	875
invader	ggg ttg tgg agt gag tgt tca agt a	876
stacker	<b>gtt tgc ttg tcc agg tgg</b>	877
arrestor	<b>cca aac tcc gaa gga ggc g</b>	878
SRT	cggaagaagcagttgtgagcggtgacggtNH2	879
FRET probe	Fcaac(Cy3)gcttcctccg	880
probe	ccg tca cgc ctc ctt cgg agt ttg NH2	881
invader	ggg ttg tgg agt gag tgt tca agt a	882
stacker	<b>gtt ttg ctt gtc cag gtg g</b>	883
arrestor	<b>cca aac tcc gaa gga ggc g</b>	884
SRT	cggaagaagcagttgtgagcggtgacggtNH2	885
FRET probe	Fcaac(Cy3)gcttcctccg	886
probe	ccg tca cgc ctc ctt cgg agt ttNH2	887
invader	ggg ttg tgg agt gag tgt tca agt a	888
stacker	<b>ggg ttt gct tgt cca ggt g</b>	889
arrestor	<b>cca aac tcc gaa gga ggc g</b>	890
SRT	cggaagaagcagttgtgagcggtgacggtNH2	891
FRET probe	Fcaac(Cy3)gcttcctccg	892
probe	ccgtcacgcctccgagttgtggNH2	893
invader	gtt gtg gag tga gtg ttc aag tat ta	894
stacker	<b>ttt gct tgt cca ggt ggt cca g</b>	895
arrestor	<b>ccc aaa ctc cgg agg cg</b>	896
SRT	cggaagaagcagttgtgagcggtgacggtNH2	897
FRET probe	Fcaac(Cy3)gcttcctccg	898
probe	ccg cga gat cac cgg agt ttg ggNH2	899
invader	gtt gtg gag tga gtg ttc aag tat ta	900
stacker	<b>ttt gct tgt cca ggt ggt cca g</b>	901
arrestor	<b>cta gtg gcc tca aac cc</b>	902
SRT	cggaagaagcagttgtgacgtcgcgcggtNH2	903
FRET probe	Fcaac(Cy3)gcttcctccg	904

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<b>hUbiquitin</b>			
probe	cgc cga gat cac ctt tac att ttc tat cgt		905
probe	cgc cga gat cac ctt tac att ttc tat cgt NH2		906
invader	5' -cct tcc tta tcc tgg atc ttg gca -3'	3' Amine	907
arrestor	<u>acg ata gaa aat gta aag gfg atc</u>	<u>all 2'Ome bases</u>	908
SRT	5'-cgc agt gag aat gag gfg atc tgc gcggt-3'	<u>3' last 3 bases 2'Ome</u>	909
FRET probe	5'-Red-ctc-Z21-ttc tca gfg cg-3'		910

<b>hIL-2</b>			
probe	gtttcttttgcctccgcaactgcccNH2	3' Amine	911
invader	cca gca gta aat gct cca gtt gta ga	<u>all 2'Ome bases</u>	912
stacker	<u>tag aac tfg aag tag gfg c</u>	<u>all 2'Ome bases</u>	913
arrestor	<u>caa aga aaa cac agg agg c</u>	<u>3' 3bases 2'Ome</u>	914
SRT	ccaggaagcaagtggaggcgtagcgggu		915
FRET probe	Fcac(Z21)tgcttctgtg		916

probe	aac gag gcg cac ctg tgt ttt ctt tg NH2	3' Amine	917
invader	cca gca gta aat gct cca gtt gta ga	<u>all 2'Ome bases</u>	918
stacker	<u>tag aac tfg aag tag gfg c</u>	<u>all 2'Ome bases</u>	919
arrestor	<u>caa aga aaa cac agg tgc g</u>	<u>3' last 3 bases 2'Ome</u>	920
SRT	ccaggaagcaagtggtagcctctgtt		921
FRET probe	Fcac(Z21)tgcttctgtg		922

probe	cgc tca cgc ctc ctc cag ttg tag NH2	3' Amine	923
invader	<u>aaa atc atc tgc tgc aaa tcc agc agt aaa tga</u>	<u>5' 6 bases 2'Ome</u>	924
stacker	<u>ctg tgc ttt ctt tgc aga ac</u>	<u>all 2'Ome bases</u>	925
arrestor	<u>cta caa ctg gag gag gc</u>	<u>all 2'Ome bases</u>	926
SRT	ccaggaagcaagtggaggcgtagcgggu	<u>3' 3bases 2'Ome</u>	927
FRET probe	Fcac(Z21)tgcttctgtg		928

probe	aac gag gcg cac ctc cag ttg tag NH2	3' Amine	929
invader	<u>aaa atc atc tgc tgc aaa tcc agc agt aaa tga</u>	<u>5' 6 bases 2'Ome</u>	930
stacker	<u>ctg tgc ttt ctt tgc aga ac</u>	<u>all 2'Ome bases</u>	931
arrestor	<u>cta caa ctg gag gfg cg</u>	<u>all 2'Ome bases</u>	932
SRT	ccaggaagcaagtggtagcctctgtt	<u>3' last 3 bases 2'Ome</u>	933
FRET probe	Fcac(Z21)tgcttctgtg		934

probe	cgc tca cgc ctc ctc ttt ctt tgt aNH2	3' Amine	935
invader	gta aat cca gca gta aat gct cca gtt gta ga		936
stacker	<b><u>gaa ctt gaa gta ggt gca ctg tt</u></b>	<b><u>all 2'Ome bases</u></b>	937
arrestor	<b><u>tacaaagaaaacacagaggcggtNH2</u></b>	<b><u>all 2'Ome bases, 3' amine</u></b>	938
SRT	ccaggagcaagtgaggcggtgacggg	<b><u>3' 3bases 2'Ome</u></b>	939
FRET probe	Fcac(Z21)tgcttcgtgg		940
probe	aac gag gcg cac ctg ttt ctt tgt aNH2	3' Amine	941
invader	gta aat cca gca gta aat gct cca gtt gta ga		942
stacker	<b><u>gaa ctt gaa gta ggt gca ctg tt</u></b>	<b><u>all 2'Ome bases</u></b>	943
arrestor	<b><u>tac.aaa.gaa.aac.aca.ggt.gcg</u></b>	<b><u>all 2'Ome bases</u></b>	944
SRT	ccaggagcaagtggtgctgctgttt	<b><u>3' last 3 bases 2'Ome</u></b>	945
FRET probe	Fcac(Z21)tgcttcgtgg		946
probe	cgc tca cgc ctc ctc cag ttg taa NH2	3' Amine	947
probe	cgc tca cgc ctc ctc cag ttg tat NH2	3' Amine	948
probe	cgc tca cgc ctc ctc cag ttg tac NH2	3' Amine	949
invader	<b><u>aaa.atc.atc.tgt.aaa.tcc.agc.agt.aaa.tga</u></b>	<b><u>5' 6 bases 2'Ome</u></b>	950
stacker	<b><u>ctg.tgt.ttt.ctt.tgt.aga.ac.</u></b>	<b><u>all 2'Ome bases</u></b>	951
arrestor	<b><u>cta.caa.ctg.gag.gag.gc</u></b>	<b><u>all 2'Ome bases</u></b>	952
SRT	ccaggagcaagtgaggcggtgacggg	<b><u>3' 3bases 2'Ome</u></b>	953
FRET probe	Fcac(Z21)tgcttcgtgg		954
probe	gcc gtc acg cct ccc ttc ttg atg NH2	3' Amine	955
invader	ttc tag aca ctg aag atg ttt cag ttc tgt gga		956
arrestor	<b><u>cat.gcc.caa.gaa.ggg.agg.cg.NH2</u></b>	<b><u>all 2'Ome bases, 3' Amine</u></b>	957
SRT	cggagaagcagttggaggcggtgacggcNH2	<b><u>3'2 bases 2'Ome, 3'Amine</u></b>	958
FRET probe	Fcaac(Cy3)gcttcctccg		959
probe	cgc tca cgc ctc taa ttc cat tca aaa tca tct NH2	3' Amine	960
invader	cat cct ggt gag ttt ggg att ctt gta att tat a		961
stacker	<b><u>gta.aat.cca.gca.gta.aat.gct.cca.gNH2</u></b>	<b><u>all 2'Ome bases, 3' Amine</u></b>	962
arrestor	<b><u>aga.tga.ttt.tga.atg.gaa.tta.gag.gcg.NH2</u></b>	<b><u>all 2'Ome bases, 3' Amine</u></b>	963
SRT	cggagaagcagttggaggcggtgacggcNH2	<b><u>3'2 bases 2'Ome, 3'Amine</u></b>	964
FRET probe	Fcaac(Cy3)gcttcctccg		965
probe	ccg ccg aga tca cct gfg ttt tct ttg ta		966
invader	gta aat cca gca gta aat gct cca gtt gta ga		967
stacker	<b><u>gaa.ctt.gaa.gta.ggt.gca.ctg.tt</u></b>	<b><u>All 2' Ome</u></b>	968
stacker	gaa ctt gaa gta ggt gca ctg tt		969

stacker	<b>gaa</b> ctt gaa gta ggt gca ctg tt	970
stacker	<b>gaa</b> <b>ctt</b> gaa gta ggt gca ctg tt	971
arrestor	<b>tac</b> <b>aaa</b> <b>gaa</b> <b>aac</b> <b>aca</b> <b>ggt</b> <b>gat</b> <b>ct</b>	972
SRT	cggaggaagcagttggtgatctcgccggnh2	973
FRET probe	Fcaac(Cy3)gcttctccg	974
probe	aac gag gcg cac cct tct tgg gca tgnh2	975
invader	ttc tag aca ctg aag atg ttt cag ttc tgt gga	976
arrestor	<b>cat</b> <b>gcc</b> <b>caa</b> <b>gaa</b> <b>ggg</b> <b>tcg</b> <b>g</b> <b>nh2</b>	977
SRT	cggagaagcagttggtgcccctcggttaanh2	978
FRET probe	Fcaac(Cy3)gcttctccg	979
probe	aac gag gcg cac taa ttc cat tca aaa tca tct	980
invader	cat cct ggt gag ttt ggg att ctt gta att tat a	981
stacker	<b>gta</b> <b>aat</b> <b>cca</b> <b>gca</b> <b>gta</b> <b>aat</b> <b>gct</b> <b>cca</b> <b>g</b> <b>nh2</b>	982
arrestor	<b>aga</b> <b>tga</b> <b>ttt</b> <b>tga</b> <b>atg</b> <b>gaa</b> <b>tta</b> <b>gtg</b> <b>gt</b> <b>nh2</b>	983
SRT	cggagaagcagttggtgcccctcggttaanh2	984
FRET probe	Fcaac(Cy3)gcttctccg	985

hIL-4	cct gtc tgc ctg cca gtt gtg ttc ttg gag nh2	986
probe	ccc tgc aga agg ttt cct tct a	987
invader	ccc tgc aga tgg ttt cct tct a	988
arrestor	<b>ctc</b> <b>caa</b> <b>gaa</b> <b>cac</b> <b>aac</b> <b>tgg</b> <b>cag</b> <b>c</b> <b>nh2</b>	989
arrestor	<b>ctc</b> <b>caa</b> <b>gaa</b> <b>cac</b> <b>aac</b> <b>tgg</b> <b>cag</b> <b>cga</b> <b>nh2</b>	990
arrestor	<b>ctc</b> <b>caa</b> <b>gaa</b> <b>cac</b> <b>aac</b> <b>tgg</b> <b>cag</b> <b>cga</b> <b>ga</b> <b>nh2</b>	991
SRT	cggaggaagcagttggtgcccctcggttaanh2	992
FRET probe	Fcaac(Cy3)gcttctccg	993
probe	aac gag gcg cac ctt gga ggc agc aaa nh2	994
probe	aac gag gcg cac ctt gga ggc agc aaanh2	995
invader	aag gtt tcc ttc tca gtt gtg tta	996
arrestor	<b>ctt</b> <b>tgc</b> <b>tcg</b> <b>ctc</b> <b>caa</b> <b>ggt</b> <b>gcg</b> <b>nh2</b>	997
SRT	cggaggaagcagttggtgcccctcggttaanh2	998
FRET probe	Fcaac(Cy3)gcttctccg	999
probe	cag tca cgt ctg tgg agg cag caa aga tg nh2	1000
invader	aag gtt tcc ttc tca gtt gtg ttc ta	1001
arrestor	<b>cat</b> <b>ctt</b> <b>tgc</b> <b>tcg</b> <b>ctc</b> <b>cag</b> <b>aga</b> <b>cg</b> <b>nh2</b>	1002

SRT 1003  
FRET probe 1004  
3' Amine  
gctactgagatgaaggagacgtgactgtatNH2  
Fcttc(Cy3)ctcagtagc  
1005  
probe 1006  
invader 1007  
arrestor 1008  
SRT 1009  
FRET probe  
aac gag gcg cac ctt gga ggc agc aaa g NH2  
aag gtt tcc ttc tca gtt gtg tta  
**ctt tgc tgc ctc caa ggt gcg NH2**  
cgaggaagcagtggtggtgcctcgttaa  
Fcaac(Cy3)gcttcctccg

**mIL-2**  
probe 1010  
invader 1011  
arrestor 1012  
arrestor 1013  
SRT 1014  
FRET probe  
cgc cga gat cac ccc tt agt tt aca aca gtnNH2  
gaa ttg gca ctc aaa tgt gtt gtc aga ga  
**act gtt gta aaa cta aag ggg gfg atc t NH2**  
cgaggaagcgggtggtgactcgcgNH2  
Fcaac(Cy3)gcttcctccg  
1015  
probe 1016  
invader 1017  
arrestor 1018  
arrestor 1019  
arrestor 1020  
arrestor 1021  
SRT 1022  
FRET probe  
tgc cgc cga gat cac ccc tt agt tt aca aca gtnNH2  
gaa ttg gca ctc aaa tgt gtt gtc aga ga  
**act gtt gta aaa cta aag ggg gfg NH2**  
**act gtt gta aaa cta aag ggg gfg at NH2**  
**act gtt gta aaa cta aag ggg gfg at ctnNH2**  
**act gtt gta aaa cta aag ggg gfg at ctcgNH2**  
cgaggaagcgggtggtgactcgcgNH2  
Fcaac(Cy3)gcttcctccg

probe 1023  
invader 1024  
arrestor 1025  
arrestor 1026  
arrestor 1027  
SRT 1028  
FRET probe  
gc cgc cga gat cac ccc tt agt tt aca aca gtnNH2  
c cgc cga gat cac ccc tt agt tt aca aca gtnNH2  
gaa ttg gca ctc aaa tgt gtt gtc aga ga  
**act gtt gta aaa cta aag ggg gfg at NH2**  
cgaggaagcgggtggtgactcgcgNH2  
Fcaac(Cy3)gcttcctccg  
1029  
probe 1030  
invader 1031  
arrestor 1032  
SRT 1033  
FRET probe  
aac gag gcg cac ccc tt agt tt aca aca gt NH2  
gaa ttg gca ctc aaa tgt gtt gtc aga ga  
**agtaactgttataaactaaaggggtgcg**  
cgaggaagcagtggtgcctcgttaa  
Fcaac(Cy3)gcttcctccg  
1034  
probe  
aac gag gcg cac ccc tt agt tt aca aca gt NH2

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invader  
arrestor  
SRT  
FRET probe

gaa ttg gca ctc aaa tgt gtt gtc aga ga  
agt aac tgt tgt aaa act aaa ggg gtc cg NH2  
cggaggaaagcagttggtgcgcctggttaa  
Fcaac(Cy3)gcttcctccg

all 2'Ome bases, 3' Amine  
3' last 5 bases 2'Ome

probe

ccgtcacgcccctcccttagttttacaacNH2

3' Amine

gaa ttg gca ctc aaa tgt gtt gtc aga ga  
agt tac tct gat att gct gat gaa att ctc ag

all 2'Ome bases.  
all 2'Ome bases.

gttgtaaaaactaaaggggagggcg

cggaagaagcagttggaggcggtgacggtNH2

3'base 2'Ome, 3'Amine

Fcaac(Cy3)gcttcctccg

FRET probe

cgccgagatcaccccttagttttacaacNH2

3' Amine

gaa ttg gca ctc aaa tgt gtt gtc aga ga

agt tac tct gat att gct gat gaa att ctc ag

gttgtaaaaactaaaggggagggcg

cggaagaagcagttggaggcggtgacggtNH2

Fcaac(Cy3)gcttcctccg

FRET probe

ccgtcacgcccctcccttagttttacaacNH2

3' Amine

gaa ttg gca ctc aaa tgt gtt gtc aga ga

cagttactctgatatgctgatgaaattctca

gttgtaaaaactaaaggggagggcg

cggaagaagcagttggaggcggtgacggtNH2

Fcaac(Cy3)gcttcctccg

FRET probe

ccgtcacgcccctcccttagttttacaacNH2

3' Amine

gaa ttg gca ctc aaa tgt gtt gtc aga ga

cagttactctgatatgctgatgaaattctca

gttgtaaaaactaaaggggagggcg

ccaggaagcagttggaggcggtgacggtNH2

Fcaac(Cy3)gcttcctccg

FRET probe

mIL-10

probe  
invader  
stacker  
arrestor  
SRT

ccg tca cgc ctc ccg tta gct aag at NH2  
cga ggt tt cca agg agt tgt tta  
ccc tgg atc aga ttt aga gag c  
atc tta gct aac ggg agg cg  
cggaagaagcagttggaggcggtgacggtNH2

3' Amine

all 2'Ome bases.  
all 2'Ome bases.  
3'base 2'Ome, 3'Amine

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FRET probe	Fcaac(Cy3)gcttctccg	1068
probe	ccg tca cgc ctc agt tgt ttc cgt tNH2	
invader	aga ggt aca aac gag gtt ttc caa ggc	1069
stacker	<u>agc taa gat ccc tgg atc aga ttt aga ga</u>	1070
arrestor	<u>aac gga aac aac tga ggc g</u>	1071
SRT	ccaggaagcaagtggagcggtgacggg	1072
FRET probe	Fcac(Z21)tgcttcgtgg	1073
probe	ccg tca cgc ctc cgc tta gct aNH2	1074
invader	caa acg agg ttt tcc aag gag ttg a	1075
stacker	<u>aga tcc ctg gat cag att tag aga gct c</u>	1076
arrestor	<u>tag cta acg gaa aga ggc g</u>	1077
SRT	ccaggaagcaagtggagcggtgacggg	1078
FRET probe	Fcac(Z21)tgcttcgtgg	1079
probe	ccg tca cgc ctc cgc tta gNH2	1080
invader	aga ggt aca aac gag gtt ttc caa gga ga	1081
stacker	<u>cta aga tcc ctg gat cag att tag aga g</u>	1082
arrestor	<u>ctaacggaaacaagagggcg</u>	1083
SRT	ccaggaagcaagtggagcggtgacggg	1084
FRET probe	Fcac(Z21)tgcttcgtgg	1085
probe	ccg tca cgc ctc cgc tta gNH2	1086
invader	aga ggt aca aac gag gtt ttc caa gga ga	
stacker	<u>cta aga tcc ctg gat cag att tag aga g</u>	
arrestor	<u>ctaacggaaacaagagggcg</u>	
SRT	ccaggaagcaagtggagcggtgacggg	
FRET probe	Fcac(Z21)tgcttcgtgg	

hIFN- $\gamma$ probe	aac gag gcg cac ctt acc aat gcc taa gaa aag agt tNH2	1087
invader	tgc att att ttt ctg tca ctc tcc tct ttc caa tta	1088
arrestor	<u>aac tct ttt ctt agg cat ttt gaa ggt gcg NH2</u>	1089
SRT	cgagggaagcagttggtgcgccttcgttaaNH2	1090
FRET probe	Fcaac(Cy3)gcttctccg	1091
probe	cag tca cgt ctc tct tca aaa tgc cta aga aaa gag tNH2	1092
invader	tct gca tta ttt ttc tgc cac tct cct ctt tcc aat a	1093
arrestor	<u>act ctt ttc tta ggc att ttg aag aga gac gNH2</u>	1094
SRT	<u>gclactgagatgaaggagacgtgactgtatNH2</u>	1095
FRET probe	Fcttc(Cy3)lctcagtagc	1096

mIFN- $\gamma$ probe	aac gag gcg cac cct ttt gcc agt tcc NH2	1097
	3' Amine	

invader  
arrestor  
SRT  
FRET probe

gct ctg cag gat ttt cat gtc acc ata  
**gag gaa ctg gca aaa ggg tgc gNH2**  
**gctactgagatgaaggagacgtgactgtanNH2**  
Fcttc(Cy3)tcctcagtagc

**all 2'Ome bases, 3' Amine**  
**all 2'Ome bases, 3' Amine**

probe  
invader  
stacker  
arrestor  
SRT  
SRT  
FRET probe

aac gag gcg cac cct ttt gcc agt NH2  
gct ctg cag gat ttt cat gtc acc ata  
**tcc tcc aga tat cca aga aga gac tc**  
**act ggc aaa agg cgg gc**  
cgg agg aaag cag ttg gtg cgc ctc guu aa NH2  
cgg aag aaag cag ttg gtg cgc ctc guu aa NH2  
Fcaac(Cy3)gcttctcog

3' Amine  
**all 2'Ome bases**  
**all 2'Ome bases**  
3' last 5 bases **2'Ome**  
3' last 5 bases **2'Ome**

probe  
invader  
stacker  
arrestor  
SRT  
FRET probe

gcc gca cgc cgt ttt cca gt NH2  
gct ctg cag gat ttt cat gtc acc ata  
**tcc tcc aga tat cca aga aga gac tc**  
**act ggc aaa agg cgg gc**  
cgg agg aag cag ttg cgg cgt gcg gca NH2  
Fcaac(Cy3)gcttctcog

3' Amine  
**all 2'Ome bases**  
**all 2'Ome bases**

probe  
invader  
stacker  
arrestor  
SRT  
FRET probe

aac gag gcg cac cct ttt gcc agt tc NH2  
gct ctg cag gat ttt cat gtc acc ata  
**ctc cag ata tcc aag aag aga ctc**  
**gaa ctg gca aaa ggg tgc g**  
cggaggagcagttgtgcgcctcgttaaNH2  
Fcaac(Cy3)gcttctcog

3' Amine  
**all 2'Ome bases**  
**all 2'Ome bases**  
3' last 5 bases **2'Ome**

hIL-8  
probe  
probe  
invader  
arrestor  
arrestor  
SRT  
FRET probe

cgc tca cgc ctc ctt ggc aaa act gca ccNH2  
cgc tca cgc ctc ctt ggc aaa act gca cca NH2  
ctt tat gca ctg aca tct aag ttc ttt agc act ca  
**tgg tgc agt tt gcc aag gag gcg NH2**  
**tgg tgc agt tt gcc aag gag gcg tg NH2**  
cggagaagcagttggagcggtgacggaNH2  
Fcaac(Cy3)gcttctcog

3' Amine  
3' Amine  
**all 2'Ome bases, 3' Amine**  
**all 2'Ome bases, 3' Amine**  
3'2 bases **2'Ome**, 3' Amine

probe  
probe  
invader

cgc tca cgc ctc cat ctt cac tga ttc ttg gNH2  
cgc tca cgc ctc cat ctt cac tga ttc ttg gaNH2  
agt gtt gaa gta gat ttg ctt gaa gtt tca ctg ga

3' Amine  
3' Amine

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stacker	gat acc aca gag aat gaa tttt	all 2'Ome bases	1131
arrestor	tcc aag aat cag tga aga tgg agg cg NH2	all 2'Ome bases, 3' Amine	1132
arrestor	tcc aag aat cag tga aga tgg agg cgt gNH2	all 2'Ome bases, 3' Amine	1133
arrestor	g aat cag tga aga tgg agg cg	all 2'Ome bases	1134
SRT	cggaagaagcagttggaggcgtgacggcNH2	3'2 bases 2'Ome, 3' Amine	1135
FRET probe	Fcaac(Cy3)gcttctccg		1136
probe	ccg tca cgc cct tgg ctc aat ttt gct NH2	3' Amine	1137
invader	cca ttc aat tcc tga aat taa agt tgg gat att ctc ttg gca		1138
invader	cc tga aat taa agt tgg gat att ctc ttg gca	5' 10 bases are 2'Ome	1139
invader	cc tga aat taa agt tgg gat att ctc ttg gca		1140
arrestor	agc aaa att gag cca agg gag gcg NH2	all 2'Ome bases, 3' Amine	1141
arrestor	agc aaa att gag cca agg gag gcg tgnNH2	all 2'Ome bases, 3' Amine	1142
SRT	cggaagaagcagttggaggcgtgacggcNH2	3'2 bases 2'Ome, 3' Amine	1143
FRET probe	Fcaac(Cy3)gcttctccg		1144
probe	ccg tca cgc ctc cat ctt cac tga ttc ttg NH2	3' Amine	1145
invader	ttc tag caa acc cat tca att cct gaa att aaa gtt cgg ata ttc ta		1146
invader	cc cat tca att cct gaa att aaa gtt cgg ata ttc ta	5' 10 bases 2'Ome	1147
invader	cc cat tca att cct gaa att aaa gtt cgg ata ttc ta		1148
arrestor	cca agg gcc aag gag gcg tNH2		1149
SRT	cggaagaagcagttggaggcgtgacggcNH2	3'2 bases 2'Ome, 3' Amine	1150
FRET probe	Fcaac(Cy3)gcttctccg		1151
probe	ccg tca cgc ctc cat ctt cac tga ttc ttg NH2	3' Amine	1152
invader	agt gtt gaa gla gat ttg ctt gaa gtt tca ctg ga		1153
stacker	ttg gat acc aca gag aat gaa tt	all 2'Ome bases	1154
SRT	cggaagaagcagttggaggcgtgacggcNH2	3'base 2'Ome, 3' Amine	1155
FRET probe	Fcaac(Cy3)gcttctccg		1156
probe	ccg tca cgc ctc cat ctt cac tga tt NH2	3' Amine	1157
invader	agt gtt gaa gla gat ttg ctt gaa gtt tca ctg ga		1158
stacker	ctt gga tac cac aga gaa tga att		1159
SRT	cggaagaagcagttggaggcgtgacggcNH2	3'base 2'Ome, 3' Amine	1160
FRET probe	Fcaac(Cy3)gcttctccg		1161
probe	ccg tca cgc ctc cat ctt cac tga ttc ttg NH2	3' Amine	1162
invader	agt gtt gaa gla gat ttg ctt gaa gtt tca ctg ga		1163
helper	ata-cca-cag-aga-atg-aat-ttt-atg	all 2'Ome bases	1164
arrestor	tcc aag aat cag tga aga tgg agg cgt gNH2	all 2'Ome bases, 3' Amine	1165

SRT FRET probe	cggaagaagcagttgagggcgtagcggtNH2 Fcaac(Cy3)gcttctccg	3'base <u>2'Ome</u> , 3'Amine	1166 1167
SRT FRET probe	cggaagaagcagttggtgatctcggcggtNH2 Fcaac(Cy3)gcttctccg	3' Amine	1168 1169
SRT FRET probe	cggaagaagcagttgagggcgtagcggtNH2 Fcaac(Cy3)gcttctccg	3'base <u>2'Ome</u> , 3'Amine	1170 1171
SRT FRET probe	ccaggaagcaagtgagggcgtagcggtNH2 Fcac(Z21)gcttctggtg	3' 3bases <u>2'Ome</u>	1172 1173
SRT FRET probe	cggaagaagcagttggtgatctcggcggtNH2 Fcaac(Cy3)gcttctccg	3' 2 last base <u>2'Ome</u> , 3' Amine	1174 1175
SRT FRET probe	cggaagaagcagttgagggcgtagcggtNH2 Fcaac(Cy3)gcttctccg	3'2 bases <u>2'Ome</u> , 3'Amine	1176 1177
SRT FRET probe	ccaggaagcaagtggtgagggcggtNH2 Fcac(Z21)gcttctggtg	3' last 3 bases <u>2'Ome</u>	1178 1179
SRT FRET probe	cggaagaagcagttggtgagggcggtNH2 Fcaac(Cy3)gcttctccg	3' last5 bases <u>2'Ome</u>	1180 1181
SRT FRET probe	cggaagaagcagttggtgatctcggcggtNH2 Fcaac(Cy3)gcttctccg	3' Last 2bases <u>2'Ome</u> , 3' Amine	1182 1183
SRT FRET probe	gctactgagatgaaggagacgtgactgtNH2 Fcttc(Cy3)tctcagtagc	3' Amine	1184 1185
SRT FRET probe	ccaggaagcagttgagggcgtagcggtNH2 Fcaac(Cy3)gcttctggtg	3' 2 bases <u>2'Ome</u> , 3'Amine	1186 1187
h3A4 probe h3A4 invader Capture Sequence	agg agc cac tcc att gga tga agc atg tac aga atc ccc ggt tat tta tgc aga		1188 1189

Set 1

86/145

1190  
1191

gtg gcg tat cac aga caa tga gag  
cct cct tta tat tcc caa gta taa cac tct aa

h3A4 probe  
h3A4 invader  
Capture Sequence

1192  
1193  
1194  
1195  
1196

AAC GAG GCG CAC CAC AGA CAA TGA GAG  
**CTCTCATGTCGTGGTGG-NH2**  
cct cct tta tat tcc caa gta taa cac tct aa  
agctcaatgcatgtacagaatccccgg  
**agctcaatgcatgtacagaatccccggg**

Set 2/Set 3  
h3A4 probe  
h3A4 arrestor  
h3A4 invader  
h3A4 stacking oligo  
h3A4 stacking oligo  
SRT  
FRET Oligo

1197  
1198  
1199  
1200

aac gag gcg cac cac aga caa tga gag ag-NH2  
**cfc tct cat tgt ctg tgg tgc g-NH2**  
cct cct tta tat tcc caa gta taa cac tct aa  
**cfc aat gca tgt aca gaa tcc ccg gtt**

Set 4  
h3A4 probe  
h3A4 arrestor  
h3A4 invader  
h3A4 stacking oligo  
SRT  
FRET Oligo

1201  
1202  
1203

aac gag gcg cac cac aga caa tga gag agc t-NH2  
**agg tct ctc att gtc tgt ggt gcg-NH2**  
cct cct tta tat tcc caa gta taa cac tct aa

Set 5  
h3A4 probe  
h3A4 arrestor  
h3A4 invader  
SRT  
FRET probe

1204

FL-caa-c(cy3)g-ctt-cct-ccg

1205  
1206  
1207

aac gag gcg cac cac aga caa tga gag agc-NH2  
**gct ctc tca ttg tct gtc gtc cg-NH2**  
cct cct tta tat tcc caa gta taa cac tct aa

Set 6  
h3A4 probe  
h3A4 arrestor  
h3A4 invader  
SRT  
FRET probe

1208

FL-caa-c(cy3)g-ctt-cct-ccg

1209  
1210  
1211  
1212

aac gag gcg cac cac aga caa tga gag a-NH2  
aac gag gcg cac cac aga caa tga gag a  
**tct ctc att gtc tgt ggt gcg c-NH2**  
**gct caa tgc atg tac aga atc ccc ggt t**

Set 7/Set 8  
h3A4 probe  
h3A4 probe  
h3A4 arrestor  
h3A4 stacking oligo

87/145

1213

h3A4 invader  
SRT  
FRET Oligo

1214  
1215  
1216  
1217

Set 9  
h3A4 probe  
h3A4 arrestor  
h3A4 invader  
h3A4 stacking oligo  
SRT  
FRET Oligo

1218  
1219  
1220  
1221

Set 1/Set 2  
h3A4 probe  
h3A4 probe  
h3A4 invader  
h3A4 arrestor  
SRT

1222  
1223  
1224  
1225  
1226  
1227

Set 1/ Set 2/ Set 3  
h3A4 probe  
h3A4 arrestor  
h3A4 invader  
h3A4 stacking oligo  
h3A4 stacking oligo  
h3A4 stacking oligo  
SRT  
FRET

1228  
1229  
1230  
1231

Set 4/Set 5  
h3A4 probe  
h3A4 probe  
h3A4 invader  
h3A4 stacking oligo  
SRT  
FRET

1232

Set 6/ Set 7/ Set 8  
h3A4 probe

88/145

h3A4 probe 1233  
h3A4 probe 1234  
h3A4 arrestor 1235  
h3A4 invader 1236  
h3A4 stacking oligo 1237

ccg tca cgc ctc gcc cca cg - NH2  
ccg tca cgc ctc gcc cca ct - NH2  
**tgt ggg gcg agg cg**  
cag cac agg ctg ttg acc atc ata aaa c  
**cuu-uuc-cau-acu-uuu-uau-gac-auu-c**

SRT  
FRET

Set 1 1238  
h3A4 probe 1239  
h3A4 arrestor 1240  
h3A4 invader 1241

ccg tca cgc ctg atc ata aaa gcc c - NH2  
**ggg ctt tta tga tca ggc g**  
cag cac agg ctg ttg acc c  
**cac act ttt cca tac ttt tta tg**

SRT  
FRET

Set 2 1242  
h3A4 probe 1243  
h3A4 arrestor 1244  
h3A4 invader 1245

aac gag gcg cac cca ttg gat gaa g - NH2  
**ctt cat cca atg ggt gcg c**  
gta cag aat ccc cgg tta ttt atg cag ta  
**ccc atc ttc att tca gag**

SRT  
FRET

Set 1 1246  
h3A5 probe 1247  
h3A5 invader

gtg gcg tat cgt gtc taa ttt caa g  
aat ggg ttt ttc tgg ttg aag aag tcc ttg a

Capture Sequence

Set 2/Set 3 1248  
h3A5 probe 1249  
h3A5 probe 1250  
h3A5 arrestor 1251  
h3A5 invader

AACGAGGGCACCCGTGCTAATTTCAAG  
AACGAGGGCACCCGTGCTAATTTCAAGGG-Pi  
**CTTGAAATTAGACACGGIGCG-NH2**  
aat ggg ttt ttc tgg ttg aag aag tcc ttg a

SRT  
FRET

Set 4 1252  
h3A5 probe 1253  
h3A5 arrestor

AACGAGGGCACCCGTGCTAATTTCAAG  
**CTTGAAATTAGACACGGIGCG-NH2**

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1254  
1255

h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

1256  
1257  
1258  
1259

Set 5  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

1260  
1261  
1262  
1263

Set 6  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
SRT  
FRET probe

1264  
1265  
1266  
1267  
1268  
1269

Set 7/Set 8  
h3A5 probe  
h3A5 probe  
h3A5 arrestor  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

1270  
1271  
1272  
1273

Set 9  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

1274

Set 10  
h3A5 probe

90/145

1275  
1276  
1277

h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

tga aat tag aca cgg tgc gc  
ggt ttt tct ggt tga aga agt cct tga  
agg gga tct gfg ttt ct

1278  
1279

Set 1  
h3A5 probe  
h3A5 invader  
Capture Sequence

tgg cgt atc tga ccc ttt ggg aat  
gaa gag cat aag ttg gaa tca cca cca ta

1280  
1281

Set 1  
h3A5 probe  
h3A5 invader  
Capture Sequence

ata cgg ttg gtc ctc tca agt cta  
ccc cat tga ttt caa cat ctt tct tgc aac

1282  
1283  
1284  
1285

Set 2/Set 3  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

aac gag gcg cac gcg tgt cta att tc - NH2  
gaa att aga cac gcg tgc gc  
ggt ttt tct ggt tga aga agt cct tc  
ccg ggg atc tgt gtt tc

1286  
1287  
1288  
1289

h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

ccg tca cgc ctc gcg tgt cta att tc -NH2  
gaa att aga cac gcg agg cg  
ggt ttt tct ggt tga aga agt cct tc  
ccg ggg atc tgt gtt tc

1290  
1291  
1292  
1293

Set 1  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET  
Set 2

aac gag gcg cag ttc ata cgt tcc -NH2  
gga acc tat gaa ctg cgc  
cca gca cag gga gtt gac ca  
cca cat ttt tcc ata ctt t

9/1/45

1294  
1295  
1296  
1297

h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

1298  
1299  
1300  
1301  
1302  
1303  
1304

Set 1-Set 4  
h3A5 probe  
h3A5 probe  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
h3A5 stacking oligo  
SRT  
FRET

1305  
1306  
1307  
1308

Set 5  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

1309  
1310  
1311  
1312

Set 6  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

1313  
1314  
1315  
1316

Set 7  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT



FRET

Set 8

h3A5 probe aac gag gcg cac agt tga cct tc - NH2  
h3A5 arrestor tga agg tca act gtg cgc  
h3A5 invader gtg atg gcc agc aca ggg c  
h3A5 stacking oligo ata cgt tcc cca cat ttt tc

SRT

FRET

1317  
1318  
1319  
1320

Set 1

h3A7 Probe tgg cgt atc tgg att aaa tct taa aag  
h3A7 Invader gac ttt tat tga gag aac gaa tgg atc taa a  
Capture Oligo

1321  
1322

Set 2

h3A7 Primary Probe AACGAGGCGCACTGGATTAAATCTTAAAG  
h3A7 Invader gac ttt tat tga gag aac gaa tgg atc taa a  
h3A7 Arrestor CTTTAAGATTAAATCCAGTGG-NH2

SRT

FRET

1323  
1324  
1325

Set 3

h3A7 Primary Probe AACGAGGCGCACTGGATTAAATCTTAAAG  
h3A7 Invader gac ttt tat tga gag aac gaa tgg atc taa a  
h3A7 Arrestor CTTTAAGATTAAATCCAGTGG-NH2  
h3A7 Stacking Oligo ctt ctt ggt gtt ttc ca

SRT

FRET

1326  
1327  
1328  
1329

Set 4

h3A7 Probe agg agc cac tca tcc ctt gac t  
h3A7 Invader oligo ctt agg gaa atc agg ctc cac tta cgg ta  
Capture Oligo

1330  
1331

Set 5/Set 6

h3A7 Primary Probe AACGAGGCGCACCTCATCCCTTGACT  
h3A7 Primary Probe AACGAGGCGCACCTCATCCCTTGACT-NH2  
h3A7 Arrestor AGTCAAGGATGAGGTCG-NH2  
h3A7 Invader oligo ctt agg gaa atc agg ctc cac tta cgg ta

1332  
1333  
1334  
1335

93/145

SRT  
FRET

Set 7 - Set 10

h3A7 Primary Probe aac gag gcg cac ctc atc cct tga c-NH2  
h3A7 Arrestor **gtc aag gga tga ggt gcg c-NH2**  
h3A7 Invader oligo ctt agg gaa atc agg ctc cac tta cgg ta  
h3A7 Stacking Oligo tca gcc ttg aga aca atg ggt ttt tct gtt ag3'  
h3A7 Stacking Oligo **tca gcc ttg aga aca atg ggt ttt tct g**  
h3A7 Stacking Oligo **ctc agc** ctt tag aac aat ggg ttt ttc t  
h3A7 Stacking Oligo **ctc agc ctt tag aac aat ggg ttt ttc t**

SRT  
FRET

Set 11

h3A7 Primary Probe aac gag gcg cac ctc atc cct tga-NH2  
h3A7 Primary Probe aac gag gcg cac ctc atc cct tga c  
h3A7 Arrestor **tca agg gat gag gtg cgc-NH2**  
h3A7 Invader oligo ctt agg gaa atc agg ctc cac tta cgg ta  
h3A7 Stacking Oligo ctc agc ctt tag aac aat ggg ttt ttc tgt tag

SRT  
FRET

Set 1

h3A7 Probe ata cgg ttg gta aag taa ttt gag gt  
h3A7 Invader gaa gcc cgt ctt cat ttc agg gtt cta ttt c

Capture Sequence

Set 2

h3A7 Primary Probe AACGAGGCGCACGTAAAGTAATTTGAGGT  
h3A7 Invader gaa gcc cgt ctt cat ttc agg gtt cta ttt c  
h3A7 Arrestor **ACCTCAAAATTACITACGTGCG-NH2**

SRT  
FRET

Set 3

h3A7 Primary Probe AACGAGGCGCACGTAAAGTAATTTGAGGT  
h3A7 Invader gaa gcc cgt ctt cat ttc agg gtt cta ttt c  
h3A7 Arrestor **ACCTCAAAATTACITACGTGCG-NH2**  
h3A7 Stacking Oligo **ctc tgg tgt tct ggg**

1336  
1337  
1338  
1339  
1340  
1341  
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1343  
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1345  
1346  
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1348  
1349

1350  
1351  
1352

1353  
1354  
1355  
1356

SRT  
FRET

Set 1

h3A7 probe  
h3A7 arrestor  
h3A7 invader  
h3A7 stacking oligo

cgc tca cgc ctc gtc ata aat acc cc - NH2  
**ggg gtc ttt atg acg agg cg**  
gcc agc ata ggc tgt tga cac  
**aga ctt ttc tat act ttt tat aac att c**

1357  
1358  
1359  
1360

SRT  
FRET

Set 2 - Set 4

h3A7 probe  
h3A7 probe  
h3A7 probe  
h3A7 arrestor  
h3A7 invader  
h3A7 stacking oligo

aac gag gcg cac gtc ata aat acc cc -NH2  
aac gag gcg cac gtc ata aat acc cc  
aac gag gcg cac gtc ata aat acc cc - HEX  
**ggg gta ttt atg acg tgc gc**  
gcc agc ata ggc tgt tga cac  
**aga ctt ttc tat act ttt tat aac att c**

1361  
1362  
1363  
1364  
1365  
1366

SRT  
FRET

Set 1

h3A7 probe  
h3A7 arrestor  
h3A7 invader  
h3A7 stacking oligo

cgc tca cgc ctc gat taa atc tta aaa gct t - NH2  
**aag ctt tta aga ttt aat cga ggc g**  
gac ttt tat tga gag aac gaa tgg atc taa tgc  
**ctt ggt gtt ttc cac aaa g**

1367  
1368  
1369  
1370

SRT  
FRET

Set 2

h3A7 probe  
h3A7 arrestor  
h3A7 invader  
h3A7 stacking oligo

aac gag gcg cac gat taa atc tta aaa gct t -NH2  
**aag ctt tta aga ttt aat cgt ggc c**  
gac ttt tat tga gag aac gaa tgg atc taa tgc  
**ctt ggt gtt ttc cac aaa g**

1371  
1372  
1373  
1374

SRT  
FRET

Set 1

h3A7 probe  
h3A7 arrestor

cgc tca cgc ctg tca tcc ctt g - NH2  
**caa ggg atg cac ggc g**

1375  
1376

95/145

1377  
1378

h3A7 invader  
h3A7 stacking oligo  
SRT  
FRET

1379  
1380  
1381  
1382

Set 1  
h3A7 probe  
h3A7 arrestor  
h3A7 invader  
h3A7 stacking oligo  
SRT  
FRET

1383  
1384  
1385  
1386

Set 2  
h3A7 probe  
h3A7 arrestor  
h3A7 invader  
h3A7 stacking oligo  
SRT  
FRET

1387  
1388

Set 1  
r4A1 Probe  
r4A1 Invader  
Capture Sequence

1389  
1390  
1391  
1392

Set 2  
r4A1 Primary Probe  
r4A1 Arrestor  
r4A1 Arrestor  
r4A1 Invader  
FRET Probe 1

1393  
1394  
1395

Set 3  
r4A1 Primary Probe  
r4A1 Arrestor  
r4A1 Invader  
SRT  
FRET Probe 1

96/145

Set 4  
 r4A1 Primary Probe aac gag gcg cac tag gct ttg ctt ctt c-NH2  
 r4A1 Arrestor gaa gca aag cct agt gcg c  
 r4A1 Stackers ccc aga acc atc gag gaa agg c  
 r4A1 Invader ttc atg tag tca tca ggg tca tag aca att aag a

1396  
 1397  
 1398  
 1399

SRT  
 FRET Probe 1

Set 5  
 r4A1 Primary Probe aac gag gcg cac tag gct ttg ctt-NH2  
 r4A1 Arrestor aag caa agc cta gtg cgc-NH2  
 r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a  
 r4A1 Stackers ccc cag aac cat cga gga aag g  
 r4A1 Stackers ccc cag aac cat cga gga aag g

1400  
 1401  
 1402  
 1403  
 1404

SRT  
 FRET Probe 1

Set 6  
 r4A1 Primary Probe aac gag gcg cac tag gct ttg ct-NH2  
 r4A1 Primary Probe aac gag gcg cac tag gct ttg ct - HEX  
 r4A1 Probe aac gag gcg cac tag gct ttg ct  
 r4A1 Arrestors agc aaa gcc tag tgc gc-NH2  
 r4A1 Arrestors agc aaa gcc tag tgc gc  
 r4A1 Invaders ttc atg tag tca ggg tca tag aca att aag a  
 r4A1 Stackers tcc cca gaa cca tgc agg aaa gg  
 r4A1 Stackers tcc cca gaa cca tgc agg aaa gg

1405  
 1406  
 1407  
 1408  
 1409  
 1410  
 1411  
 1412

SRT  
 FRET Probe 1

Set 1  
 r4A1 Probe ata cgg ttg gtc ttg acc tgc c  
 r4A1 Invader agg aga tat gtt gaa aga ttt cta tag agg ac  
 Capture Sequence

1413  
 1414

Set 2  
 r4A1 Primary Probe AACGAGGCGCACGCTTGTACCTGCC  
 r4A1 Arrestors GGCAGGTCAGACGTCG-NH2  
 r4A1 Invaders agg aga tat gtt gaa aga ttt cta tag agg ac

1415  
 1416  
 1417

SRT  
FRET Probe 1

Set 3

r4A1 Primary Probe AACGAGGCGCACGTCTTGACCTGC-Pi  
r4A1 Arrestor GGCAGGTCAAGACGIGCG-NH2  
r4A1 Invader agg aga tat gtt gaa aga ttt cta tag agg ac  
SRT  
FRET Probe 1

1418  
1419  
1420

Set 1

r4A1 Probe tgg cgt atc tta gat gga gta agg a  
r4A1 Invader att cct cat aat tca aaa ggg act tag tag gt

1421  
1422

Set 2

r4A1 Primary Probe AACGAGGCGCACCTTAGATGGAGTAAGGA  
r4A1 Arrestor TCCTTACTCCATCTAAGTGGC-NH2  
SRT  
FRET Probe 1

1423  
1424

Set 1

r4A1 Primary Probe aac gag gcg cac tgg ata ccc ttg gg-NH2  
r4A1 Arrestor ccc aag ggt atc cag tgc gc-NH2  
r4A1 Invader ggt gga gac cat aaa tgg aga gtg tga cta  
SRT  
FRET Probe 1

1425  
1426  
1427

Set 1

r4A2 Probe aac gag gcg cac agg tgt ctg gag taa aag-NH2  
r4A2 Arrestor ctt tta ctc cag aca cct gtc cgc-NH2  
r4A2 Invader gtc cac gca caa gct ggg ac  
SRT  
FRET Probe 1

1428  
1429  
1430

Set 1

r4A2 Probe aac gag gcg cac aga agg ccc ctt-NH2  
r4A2 Arrestor aag ggg cct tct gtc cgc-NH2  
r4A2 Invader cct tga aca gca cca gaa ata gac tga gca c  
r4A2 stacking oligo gga aga acc cag aga cac cat cc  
SRT

1431  
1432  
1433  
1434

98/145

FRET Probe 1

Set 2

r4A2 Probe  
r4A2 Arrestor  
r4A2 Invader  
SRT

1435  
1436  
1437

FRET Probe 1

Set 3

r4A2 Probe  
r4A2 Arrestor  
r4A2 Invader  
SRT

1438  
1439  
1440

FRET Probe 1

Set 4

r4A2 Probe  
r4A2 Probe  
r4A2 Probe  
r4A2 Arrestor  
r 4A2 Arrestor  
r4A2 Invader  
SRT

1441  
1442  
1443  
1444  
1445  
1446

FRET Probe 1

Set 1

r4A3 Probe  
r4A3 Arrestor  
r4A3 Invader  
SRT

1447  
1448  
1449

FRET Probe 1

Set 2

r4A3 Probe  
r4A3 Arrestor  
r4A3 Invader  
r4A3 stacking oligo  
SRT

1450  
1451  
1452  
1453

FRET Probe 1

99/145

Set 3

r4A3 Probe  
 aac gag gcg cac ttg aca gag tcc-NH2  
 r4A3 Probe  
 aac gag gcg cac ttg aca gag tcc  
 rCYP 4A3 Probe  
 aac gag gcg cac ttg aca gag tcc - HEX  
 r4A3 Arrestor  
**gga ctc tgt caa gtg cgc-NH2**  
 rCYP 4A3 Arrestor  
**gga ctc tgt caa gtg cgc**  
 r4A3 Invader  
 gct tct ccc att tgt cta gca tta taa  
 r4A3 stacking oligo  
 gcc atg att ttg aca tag ggt ttg agg atg  
 SRT  
 FRET Probe 1

1454  
 1455  
 1456  
 1457  
 1458  
 1459  
 1460

Set 1

r2B1 probe  
 cgg agc ctc tgc ggt cat caa g  
 r2B1 invader  
 tgg ata act gca tca gtg tat ggc att tta a  
 Capture Sequence

1461  
 1462

Set 2/ Set 3

r2B1 probe  
 gtg-gcg-tat-ctg-cgg-tca-tca-ag  
 r2B1 probe  
 gtg-gcg-tat-ctg-cgg-tca-tca-a  
 r2B1 invader  
 tgg ata act gca tca gtg tat ggc att tta a  
 Capture Sequence

1463  
 1464  
 1465

Set 4

r2B1 probe  
 tg-gcg-tat-ctg-cgg-tca-tca-a  
 r2B1 invader  
 tgg ata act gca tca gtg tat ggc att tta a  
 Capture Sequence

1466  
 1467

Set 5 - Set 7

r2B1 probe  
 aac-gag-gcg-cac-ctg-cgg-tca-tca-a  
 r2B1 arrestor  
**ttg-atg-acc-gca-ggt-gcg-cc-NH2**  
 r2B1 arrestor  
**ttg-atg-acc-gca-ggt-gcg-cc-Pi**  
 r2B1 arrestor  
**ttg-atg-acc-gca-ggt-gcg-cc-OH**  
 r2B1 invader  
 tgg ata act gca tca gtg tat ggc att tta a  
 SRT  
 FRET

1468  
 1469  
 1470  
 1471  
 1472

Set 8

r2B1 probe  
 aac-gag-gcg-cac-ctg-cgg-tca-tca-a

1473

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1474  
1475  
1476

**ttg-atg-acc-gca-ggt-gcg-cc-Pi**  
tgg ata act gca tca gtg tat ggc att tta a  
ggg ttg gta gcc tgt gtg agc cga t

r2B1 arrestor  
r2B1 invader  
r2B1 stacker  
SRT  
FRET

1477  
1478  
1479

aac-gag-gcg-cac-clg-cgg-tca-tca-a-NH2  
**ttg-atg-acc-gca-ggt-gcg-NH2**  
tgg ata act gca tca gtg tat ggc att tta a

Set 9  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

1480  
1481  
1482

ggc-aac-gag-gca-cac-clg-cgg-tca-tca-ag-Pi  
**ttg-atg-acc-gca-ggt-gcg-cc-Pi**  
tgg ata act gca tca gtg tat ggc att tta a

Set 10  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

1483  
1484  
1485

aac gag ggg cac clg cgg tca tca ag-NH2  
ctt gat gac cgc agg tgc c-NH2  
tgg ata act gca tca gtg tat ggc att tta a

Set 11  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

1486  
1487  
1488

aac gag gcg cac clg cgg tca tca agg-NH2  
**cct tga tga ccg cag gtg cg-NH2**  
tgg ata act gca tca gtg tat ggc att tta a

Set 12  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

1489  
1490  
1491

atg acg tga cag acc tgc ggt cat caa g-NH2  
**ctt gat gac cgc agg tct gt-NH2**  
tgg ata act gca tca gtg tat ggc att tta a

Set 13  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

Set 14  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

aac gag gcg cac ctg agg tca tca a-NH2  
**ttg atg acc tca ggt gcg-NH2**  
tgg ata act gca tca gtg tat ggc att tta a

1492  
1493  
1494

Set 15  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

cag tca cgt ctg ctg cgg tca tca ag-NH2  
**ctt gat gac cgc agg aga cg-NH2**  
tgg ata act gca tca gtg tat ggc att tta a

1495  
1496  
1497

Set 16  
r2B1 probe  
r2B1 invader  
r2B1 arrestor  
SRT  
FRET

cag tca cgt ctg act gcg gtc atc aag-NH2  
gtg gat aac tgc atc agt gta tgg cat ttt c  
**ctt gat gac cgc agt gag acg-NH2**

1498  
1499  
1500

Set 17  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
r2B1 stacker  
SRT  
FRET

cag tca cgt ctg act gcg gtc atc aa-NH2  
**ttg atg acc gca gtg aga cg-NH2**  
gtg gat aac tgc atc agt gta tgg cat ttt c  
ggg ttg gta gcc tgt gtg agc cga t

1501  
1502  
1503  
1504

Set 18  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
r2B1 stacker  
SRT  
FRET

cag tca cgt ctg act gcg gtc atc a-NH2  
**tga tga cgc cag tga gac g-NH2**  
gtg gat aac tgc atc agt gta tgg cat ttt c  
agg gtt ggt agc ctg tgt gag ccg a

1505  
1506  
1507  
1508

Set 19  
r2B1 probe

cag tca cgt ctg act gcg gtc atc aag-NH2

1509

1510  
1511  
1512

r2B1 arrestor  
r2B1 invader  
r2B1 stacker  
SRT  
FRET

**ctt gat gac cgc agt gag acg-NH2**  
gtg gat aac tgc atc agt gta tgg cat ttt c  
ggg tgg tag cct gtg tga gcc gat c

1513  
1514  
1515  
1516

Set 20  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
r2B1 stacker  
SRT  
FRET

cag tca cgt ctc act gcg gtc atc a-NH2  
**atg acc gca gtg aga cg-NH2**  
gtg gat aac tgc atc agt gta tgg cat ttt c  
caa ggg ttg gta gcc tgt gtg agc c

1517  
1518  
1519  
1520

Set 21  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
r2B1 stacker  
SRT  
FRET

ccg tca cgc ctc act gcg gtc atc a-NH2  
**tga tga ccg cag tga gcc g-NH2**  
gtg gat aac tgc atc agt gta tgg cat ttt c  
agg gtt ggt agc ctc tgt gag ccg a

1521  
1522  
1523  
1524

Set 22  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
r2B1 stacker

ccg tca cgc ctc act gcg gtc atc-NH2  
**gat gac cgc agt gag ccg-NH2**  
gtg gat aac tgc atc agt gta tgg cat ttt c  
aag ggt tgg tag ccg gtg tg

1525  
1526  
1527  
1528  
1529

Set 23  
r2B1 probe  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
r2B1 stacker  
SRT  
FRET

ccg tca cgc ctc act gcg gtc atc-NH2  
ccg tca cgc ctc act gcg gtc at  
**atg acc gca gtg agg cg-NH2**  
gtg gat aac tgc atc agt gta tgg cat ttt c  
**caa** ggg ttg gta gcc tgt gtg agc c

1530  
1531

Set 1  
r2B1 invader  
r2B1 probe

atg gtg tct ttg gtg act ctc tgt ggt aca  
aac-gag-gcg-cac-tcc-aat-agg-gac-aag

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1532

ctt-gtc-cct-att-gga-gtg-cgc-c

r2B1 arrestor  
SRT  
FRET

1533  
1534

Set 1  
r2B1 probe  
r2B1 invader  
Capture Sequence

gcg ggc tac agc cgg tgt gag c  
cat ttt act ggc gtc atc aag ggt tgg tc

1535  
1536

r2B1 probe  
r2B1 invader  
Capture Sequence

tgg cgt atg agc cgg tgt gag c  
cat ttt act ggc gtc atc aag ggt tgg tc

1537  
1538  
1539

Set 1  
r2B2 invader  
r2B2 probe  
r2B2 arrestor  
SRT  
FRET

gga tga ctg cat cag tgt atg gca ttt tgc  
aac-gag-gcg-cac-gta-tca-tca-agg  
**cct-tga-tga-tcg-tac-gtg-cgc-c-NH2**

1540  
1541  
1542  
1543

Set 1  
r2B2 invader  
r2B2 probe  
r2B2 stacker  
r2B2 invader stacker

atg gtg tct ttg gtg act ctg tgt ggt aac  
tgg cgt atg acc aat tgg ggc aa  
gat ctg caa atc tct gaa tct cgt gga tg  
tct tgg aga gca ggt acc ctc gga ac

1544  
1545  
1546  
1547

Set 2  
r2B2 probe  
r2B2 invader  
r2B2 stacker  
r2B2 invader stacker

tgg cgt atg acc aat tgg ggc aag  
atg gtg tct ttg gtg act ctg tgt ggt aac  
atc tgc aaa tct ctg aat ctc gtg gat ga  
tct tgg aga gca ggt acc ctc gga ac

1548  
1549  
1550  
1551

Set 3  
r2B2 probe  
r2B2 probe  
r2B2 arrestor  
r2B2 invader  
SRT  
FRET

aac-gag-gcg-cac-acc-aat-tgg-ggc-aag  
aac gac gcg cac acc aat tgg ggc aag  
**ctt-gcc-cca-att-ggt-gtg-cgc-c-NH2**  
atg gtg tct ttg gtg act ctg tgt ggt aac

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Set 4

r2B2 probe  
r2B2 arrestor  
r2B2 invader  
SRT  
FRET

aac-gag-gcg-cac-acc-aat-tgg-ggc-aag-Pi  
**ctt-gcc-cca-att-ggt-gtg-cgc-c-Pi**  
atg gtg tct ttg gtg act ctg tgt ggt aac

1552  
1553  
1554

Set 5

r2B2 arrestor  
r2B2 probe  
r2B2 invader  
r2B2 stacker  
SRT  
FRET

**ctt-gcc-cca-att-ggt-gtg-cg-NH2**  
aac-gag-gcg-cac-acc-aat-tgg-ggc-aag-NH2  
atg gtg tct ttg gtg act ctg tgt ggt aac  
atc tgc aaa tct ctg aat ctc gtg gat ga

1555  
1556  
1557  
1558

Set 6

r2B2 probe  
r2B2 arrestor  
r2B2 invader  
SRT  
FRET

ggc-aac-gag-gca-cac-caa-ttg-ggg-caa-g  
**ctt-gcc-cca-att-ggt-gtg-cgc-c-NH2**  
atg gtg tct ttg gtg act ctg tgt ggt aac

1559  
1560  
1561

Set 7

r2B2 probe  
r2B2 arrestor  
r2B2 invader  
SRT  
FRET

aac gag gcg cac acc aat tgg ggc aag atc-NH2  
**gat ctt gcc cca att ggt gtg cg-NH2**  
atg gtg tct ttg gtg act ctg tgt ggt aac

1562  
1563  
1564

Set 8

r2B2 probe  
r2B2 arrestor  
r2B2 invader  
r2B2 stacker  
SRT  
FRET

aac gag gcg cac acc aat tgc ggc aag-NH2  
**ctt gcc cga att ggt gtg cg-NH2**  
atg gtg tct ttg gtg act ctg tgt ggt aac  
atc tgc aaa tct ctg aat ctc gtg gat ga

1565  
1566  
1567  
1568

Set 9

r2B2 probe

cag tca cgt ctc atg gtg gcc tgt g-NH2

1569

1570  
1571

gta tgg cat ttt ggt acg atc atc aag ggc  
**cac agg cca cca tga gac g-NH2**

r2B2 invader  
r2B2 arrestor  
SRT  
FRET

1572  
1573  
1574  
1575

cag tca cgt ctc aga gcc aat cac ctg-NH2  
cga tca tca agg gat ggt ggc ctg tgc  
**cag gtg att ggc tct gag acg-NH2**  
atc aat ctc ctt ttg gac ttt ctc tgc g

Set 10  
r2B2 probe  
r2B2 invader  
r2B2 arrestor  
r2B2 stacker  
SRT  
FRET

1576  
1577  
1578  
1579

cag tca cgt ctc aga gcc aat cac ct-NH2  
cga tca tca agg gat ggt ggc ctg tgc  
**agg tga ttg gct ctg aga cg-NH2**  
gat caa tct cct ttt gga ctt tct ctg c

Set 11  
r2B2 probe  
r2B2 invader  
r2B2 arrestor  
r2B2 stacker  
SRT  
FRET

1580

FAM-cag tca cgt ctc aga gcc aat cac ct-NH2

Set 12  
r2B2 probe

1581  
1582  
1583  
1584  
1585

cag tca cgt ctc aga gcc aat cac c-NH2  
**ggg gat tgg ctc tga gac g-NH2**  
cga tca tca agg gat ggt ggc ctg tgc  
gat caa tct cct ttt gga ctt tct ctg c  
tga tca atc tcc ttt tgg act ttc tct gc

Set 13 / Set 14  
r2B2 probe  
r2B2 arrestor  
r2B2 invader  
r2B2 stacker  
r2B2 stacker  
SRT  
FRET

1586  
1587  
1588  
1589

cag tca cgt ctc aga gcc aat cac-NH2  
**gtg att ggc tct gag acg-NH2**  
ctg atc aat ctc ctt ttg gac ttt ctc tgc g  
cga tca tca agg gat ggt ggc ctg tgc

Set 15  
r2B2 probe  
r2B2 arrestor  
r2B2 stacker  
r2B2 invader  
SRT  
FRET

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## Set 16

r2B2 probe  
 r2B2 arrestor  
 r2B2 invader  
 r2B2 stacker  
 SRT  
 FRET

cag tca cgt ctc aga gcc aat cac ct-NH2  
**agg tga ttg cct ctg aga cg-NH2**  
 cga tca tca agg gat ggt gcc ctg tgc  
 gat caa tct cct ttg gga ctt tct ctg c

1590  
 1591  
 1592  
 1593

## Set 17

r2B2 probe  
 r2B2 arrestor  
 r2B2 invader  
 r2B2 stacker  
 SRT  
 FRET

cag tca cgt ctc aga gcc aat cac ctg-NH2  
**cag ctg att gcc tct gag acg-NH2**  
 cga tca tca agg gat ggt gcc ctg tgc  
 atc aat ctc ctt ttg gac ttt ctc tgc g

1594  
 1595  
 1596  
 1597

## Set 18

r2B2 probe  
 r2B2 arrestor  
 r2B2 invader  
 r2B2 stacker  
 SRT  
 FRET

ccg tca cgc ctc aga gcc aat cac ct-NH2  
**agg tga ttg gct ctg agg cg-NH2**  
 cga tca tca agg gat ggt gcc ctg tgc  
 gat caa tct cct ttg gga ctt tct ctg c

1598  
 1599  
 1600  
 1601

## Set 19

r2B2 probe  
 r2B2 arrestor  
 r2B2 invader  
 r2B2 stacker  
 SRT  
 FRET

ccg tca cgc ctc aga gcc aat cac c-NH2  
**ggg gat tgg ctc tga gcc g-NH2**  
 cga tca tca agg gat ggt gcc ctg tgc  
 tga tca atc tcc ttg tgg act ttc tct gc

1602  
 1603  
 1604  
 1605

## Set 20-21

r2B2 probe  
 r2B2 probe  
 r2B2 arrestor  
 r2B2 invader  
 r2B2 stacker

ccg tca cgc ctc aga gcc aat cac-NH2  
 ccg tca cgc ctc aga gcc aat cac  
**gtg att gcc tct gag gcc-NH2**  
 cga tca tca agg gat ggt gcc ctg tgc  
**ctg** atc aat ctc ctt ttg gac ttt ctc tgc g

1606  
 1607  
 1608  
 1609  
 1610

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Set 22

r2B2 probe  
r2B2 invader  
r2B2 arrestor  
SRT  
FRET

cag tca cgt ctc atg gtc aaa gta ctg tgg-NH2  
gga agt gct cag gat tga agg tgt ctg gc  
**cca cag tac ttt gac cat gag acg-NH2**

1611  
1612  
1613

Set 23

r2B2 probe  
r2B2 arrestor  
r2B2 invader  
SRT  
FRET

aac gag gcg cac atg gtc aaa gta ctg tgg-NH2  
**cca cag tac ttt gac cat gtc cgc-NH2**  
gga agt gct cag gat tga agg tgt ctg gc

1614  
1615  
1616

r2B2 probe  
r2B2 invader

cat acg gtt ggg cct gtc aga gc  
cat ttt ggt acg atc atc aag gga tgg tc

1617  
1618

r3A1 probe  
r3A1 probe  
r3A1 invader  
r3A1 probe  
r3A1 probe  
r3A1 arrestor  
r3A1 probe  
r3A1 probe  
r3A1 arrestor  
r3A1 arrestor  
r3A1 arrestor  
r3A1 arrestor  
r3A1 arrestor  
r3A1 arrestor  
r3A1 arrestor  
r3A1 arrestor  
r3A1 arrestor  
r3A1 arrestor

agg agc cac ggg tcc caa atc  
FL-agg agc cac ggg tcc caa atc  
tcc cct gtt tct tga aaa gtc cat gtc tga  
F-tcg cgt agt cgg gtc cca aat c  
cat-ctt-cgc-gga-cgg-gtc-cca-aat-c  
**gat-ttg-gga-ccc-ggt-gcg-cc-NH2**  
aac-gag-gcg-cac-cgg-gtc-cca-aat-c-NH2  
cat-ctt-cgc-gga-cgg-gtc-cca-aat-c - NH2  
**gga ttt ggg acc cgt ccg cga - NH2**  
**gga-ttt-ggg-acc-cgt-ccg-cg -NH2**  
**gga ttt ggg acc cgt ccg c - NH2**  
**gga ttt ggg acc cgt ccg - NH2**  
**gat-ttg-gga-ccc-ggt-gcg-c-NH2**  
**gat-ttg-gga-ccc-ggt-gcg-NH2**  
**gat-ttg-gga-ccc-ggt-gc-NH2**  
**gat-ttg-gga-ccc-ggt-gcg-ccf-NH2**  
**gat-ttg-gga-ccc-ggt-gcg-cct-c-NH2**

1619  
1620  
1621  
1622  
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1624  
1625  
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1629  
1630  
1631  
1632  
1633  
1634  
1635

r3A1 probe  
r3A1 probe  
r3A1 probe

aac gag gcg cac cgg gtc cca aat c-Pi

1636



r3A1 invader	tcc cct gtt tct tga aaa gtc cat gtg tga	1637
r3A1 probe	aac gag gcg cac cgg gtc cca aat c-NH2	1638
r3A1 arrestor	<b>gat ttg gga ccc ggt gcg-NH2</b>	1639
r3A1 probe	aac gag gcg cac cgg gtc cca aat c-NH2	1640
r3A1 arrestor	<b>gga ttt ggg acc cgg tgc gc-NH2</b>	1641
r3A1 probe	aac gag gcg cac cgg gtc cca aat-NH2	1642
r3A1 arrestor	<b>att tgg gac ccg gtg cgc-NH2</b>	1643
r3A1 stacker	ccg tag agg agc acc agg acg	1644
r3A1 probe	aac gag gcg cac cgg gtc cca aa-NH2	1645
r3A1 arrestor	<b>ttt ggg acc cgg tgc gc-NH2</b>	1646
r3A1 stacker	tcc gta gag gag cac cag ga	1647
r3A1 probe	cag tca cgt ctc cgg gtc cca aa-NH2	1648
r3A1 arrestor	<b>ttt ggg acc cgg aga cg-NH2</b>	1649
r3A1 stacker	<b>tcc gta gag gag cac cag ga</b>	1650
r3A1 probe	ccg tca cgc ctc cgg gtc cca aa-NH2	1651
r3A1 arrestor	<b>ttt ggg acc cgg agg cg-NH2</b>	1652
r3A1 stacker	<b>tcc gta gag gag cac cag ga</b>	1653
r3A1 stacker	<b>tcc gta gag gag cac cag ga</b>	1654
r3A1 probe	aac gag gcg cac cgg gtc cca-NH2	1655
r3A1 arrestor	<b>tgg gac ccg gtg cgc-NH2</b>	1656
r3A1 probe	ccg tca cgc ctc cgg gtc cca-NH2	1657
r3A1 arrestor	<b>tgg gac ccg gag gcg-NH2</b>	1658
r3A1 stacker	aat ccg tag agg agc acc agg	1659
r3A1 probe	aac gag gcg cac cgg gtc cca	1660

r3A2 invader	ttc ctt gtt tct taa aaa ttc cat gtc taa	1661
r3A2 invader	att ttt cga tac ttt tta tag cac tcc atc	1662
r3A2 probe	tgg cgt atc tgg gtt cca agt c	1663
r3A2 probe	aac gag gcg cac gtc aaa tct ccc taa	1664
r3A2 probe	aac-gag-gcg-cac-tgg-gtt-cca-agt-c	1665
r3A2 arrestor	<b>tta ggg aga ttt gac gtg cgc c - NH2</b>	1666
r3A2 arrestor	<b>gac ttg gaa ccc agt gcg-NH2</b>	1667
r3A2 probe	aac gag gcg cac tgg gtt cca agt c	1668
r3A2 probe	aac-gag-gcg-cac-tgg-gtt-cca-agt-c-Pi	1669
r3A2 arrestor	<b>gac ttg gaa ccc agt gcg-NH2</b>	1670
r3A2 probe	aac gag gcg cac tgg gtt cca agt cg-NH2	1671
r3A2 arrestor	<b>cga ctt gga acc cag tgc gc-NH2</b>	1672
r3A2 probe	aac gag gcg cac aac cat cca gtt cta ta-NH2	1673

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r3A2 invader	gga atc gtc act act gac cct ttg ggt ata aac ac	1674
r3A2 stacker	tct ttt tta cag act ctc tca agt cta tta cc	1675
r3A2 arrestor	<b>tat aga act tga tgg ttg tgc gc-NH2</b>	1676
r3A2 probe	aac gag gcg cac aac cat caa gtt cta-NH2	1677
r3A2 stacker	tat ctt ttt tac aga ctc tct caa gtc tat tac c	1678
r3A2 arrestor	<b>tag aac ttg atg gtt gtg cgc-NH2</b>	1679
r3A2 probe	cag tca cgt ctc ctc ggc agg gc-NH2	1680
r3A2 invader	cac aat atc gta ggt agg agg tgc ctt aa	1681
r3A2 arrestor	<b>gcc ctg ccc agg aga cg-NH2</b>	1682
r3A2 probe	cag tca cgt ctc ctc ggc agg g-NH2	1683
r3A2 stacker	ccc cat cga tct cct cct g	1684
r3A2 arrestor	<b>ccc tgc cga gga gac g-NH2</b>	1685
r3A2 probe	cag tca cgt ctc ctc ggc agg-NH2	1686
r3A2 stacker	gcc cca tgc atc tcc tcc	1687
r3A2 arrestor	<b>cct gcc gag gag acg-NH2</b>	1688
r3A2 probe	cag tca cgt ctc ctc ggc ag-NH2	1689
r3A2 stacker	ggc ccc atc gat ctc ctc	1690
r3A2 arrestor	<b>ctg ccc agg aga cg-NH2</b>	1691
r3A2 probe	ccg tca cgc ctc ctc ggc agg-NH2	1692
r3A2 arrestor	<b>ccf gcc gag gag gcg-NH2</b>	1693
r3A2 stacker	<b>gcc cca tgc atc tcc tcc</b>	1694
r3A2 probe	ccg tca cgc ctc ctc ggc agg	1695
hICAM-1 probe	ccg tca cgc ctc ggc ttg tgt gtt c-NH2	1696
hICAM-1 invader	ccg gga tag gtt cag gga ggc gtc	1697
hICAM-1 stacker	<b>ggt ttc atg ggg gtc cct</b>	1698
hICAM-1 arrestor	<b>gaa cac aca agc cga ggc g</b>	1699
hVCAM-1 probe	ccg tca cgc ctc gcc ttt gtt tgg-NH2	1700
hVCAM-1 arrestor	<b>cca aac aaa ggc gag gcg</b>	1701
hVCAM-1 invader	ggg caa cat tga cat aaa gtg ttt gcg tac tct c	1702
hVCAM-1 stacker	<b>glt cga att cca tgt cat c</b>	1703
hVCAM-1 probe	ccg tca cgc ctc gcc ttt gtt tg-NH2	1704
hVCAM-1 arrestor	<b>caa aca aag gcg agg cg</b>	1705
hVCAM-1 stacker	<b>ggt tgc aat tcc atg tca tc</b>	1706
hGAPDH probe	aac gag gcg cac gct cct gga aga tg-NH2	1707
hGAPDH arrestor	<b>cat ctt cca gga gcg tgc gcc-NH2</b>	1708



## Oligo sequence descriptions:

5' to 3' direction, 2'-Ome nts are bolded and underlined, internal modifications are defined in ( ), ASR of primary probes are underlined  
 C18ddC = C18 linker+dideoxy C, ddC = dideoxy C, FI = Fluorescein

Oligo Type	Oligo Sequence	SEQ ID NO
<b>HUMAN IL-2</b>		
Human IL-2 Probe	FI- CGAAATTAATACGCCITCTTGGGCATGTAC -C18ddC	1736
Human IL-2 Probe	CGAAATTAATACGCCITCTTGGGCATGTAC -C18ddC	1737
Human IL-2 Invader	CTGAAGATGTTTCAGTTCGTG- ddC	1738
Human IL-2 Invader	GAAGATGTTTCAGTTCGTGCG	1739
Human IL-2 Probe	TCACATTCCTACCTTCTTGGGCATGTAA	1740
Human IL-2 Probe	TCACATTCCTACCTTCTTGGGCATGTAAAC	1741
Human IL-2 Probe	TCACATTCCTACCTTCTTGGGCATGTAA- C18ddC	1742
Human IL-2 Invader	GAAGATGTTTCAGTTCGTGCG- ddC	1743
Human IL-2 Probe	FI- ACTTCCTACTTAATTCCTATTCATAAATC	1744
Human IL-2 Probe	ACTTCCTACTTAATTCCTATTCATAAATC - C18ddC	1745
Human IL-2 Invader	GAGTTGGGATCTTGTAAATAT- ddC	1746
Human IL-2 Probe	FI- CGTGTCTGTGGCGTATCTTAATTCCTATTCATAAATC	1747
Human IL-2 Probe	CGTGTCTGTGGCGTATCTTAATTCCTATTCATAAATC	1748
Human IL-2 Invader	GAGTTGGGATCTTGTAAATAT - ddC	1749
Human IL-2 Probe	FI- CGTGTCTGTGGCGTATCTTAATTCCTATTCATAAATC	1750
Human IL-2 Probe	CGTGTCTGTGGCGTATCTTAATTCCTATTCATAAATC	1751
Human IL-2 Probe	FI- CGTGTCTGTGGCGTATCTTAATTCCTATTCATAAATC	1752
Human IL-2 Probe	CGTGTCTGTGGCGTATCTTAATTCCTATTCATAAATC	1753
Human IL-2 Invader	GAGTTGGGATCTTGTAAATAT- ddC	1754
<b>HUMAN <math>\beta</math>-ACTIN</b>		
Human $\beta$ -actin Probe	FI- TTCCTACTCTTGAICTTCATTCG	1755
Human $\beta$ -actin Invader	CTCAGGAGGAGCAATGATCTT	1756
Human $\beta$ -actin Invader	CTCAGGAGGAGCAATGAT	1757
Human $\beta$ -actin Probe	FI- TCACATTCCTACTCTGGGICATCTTCG -C18ddC	1758
Human $\beta$ -actin Probe	TCACATTCCTACTCTGGGICATCTTCG -C18ddC	1759
Human $\beta$ -actin Invader	GTGTTGAAGGTCTCAACATGAT- ddC	1760
Human $\beta$ -actin Invader	GGGTGTTGAAGGTCTCAACATGAT - ddC	1761
Human $\beta$ -actin Probe	FI- CGTGTCTGTGGCGTATCTGGGICATCTTCG	1762
Human $\beta$ -actin Probe	CGTGTCTGTGGCGTATCTGGGICATCTTCG	1763
Human $\beta$ -actin Invader	GGGTGTTGAAGGTCTCAACATGAT - ddC	1764
<b>GAPDH</b>		
Human GAPDH Probe	FI- TTCATACGGTTGGTAGTGGGICAAATG	1765
Human GAPDH Probe	TTCATACGGTTGGTAGTGGGICAAATG	1766
Human GAPDH Invader	GGAATCATATTGGAACATGTAAACCATC	1767
Human GAPDH Probe	FI- TTCATACGGTTGGTCCCTGGAAGATG	1768

Human GAPDH Probe	TTCATACGGTTGGCTCCIGGAAGATG	1769
Human GAPDH Invader	CACCTGATTTGGAGGGATCTCA	1770
Human/Mouse/Rat GAPDH Probe	TTCATACGGTTGGTAGTTGAGGICAAATG	1771
Mouse/Rat GAPDH Invader	AGAATCATACTGGAACATGTAGACCATC	1772
Mouse GAPDH Probe	FI-TGGCGTATCATGTAGTTGA	1773
Mouse GAPDH Probe	TGGCGTATCATGTAGTTGA	1774
Mouse GAPDH Invader	GGAGTCATACTGGAACATGTAGACC	1775
Mouse GAPDH Probe	TGGCGTATCATGTAGTTGA	1776
Mouse GAPDH Invader	AGTCATACTGGAACATGTAGACA	1777
Mouse GAPDH Invader	GGAGTCATACTGGAACATGTAGACA	1778
<b>MOUSE IL-6</b>		
Mouse IL-6 Probe	FI- TGGCGTATCTCTTTTCTCATI	1779
Mouse IL-6 Probe	TGGCGTATCTCTTTTCTCATI	1780
Mouse IL-6 Invader	ACAATCAGAATTGCCATTGCACAACA	1781
<b>MOUSE ONCOSTATIN M</b>		
Mouse Oncostatin M Probe	FI-GAAGGCAGAGAGACCGTGAGGC	1782
Mouse Oncostatin M Probe	GAAGGCAGAGAGACCGTGAGGC	1783
Mouse Oncostatin M Invader	AAGACATCTGGTGTGTAGTGA	1784
Mouse Oncostatin M Probe	FI-TGGCGTATCTCTTCCAGAGAAAGC	1785
Mouse Oncostatin M Probe	TGGCGTATCTCTTCCAGAGAAAGC	1786
Mouse Oncostatin M Invader	CACTGAGCCGATGAAGCGATGGTAA	1787
Mouse Oncostatin M Probe	FI- TGGCGTATCTAGGGCTCCAAGAG	1788
Mouse Oncostatin M Probe	TGGCGTATCTAGGGCTCCAAGAG	1789
Mouse Oncostatin M Invader	GTGTTCAAGTTTGGAGGCGGATAA	1790
Mouse Oncostatin M Probe	FI-TGGCGTATCTAGGGCTCCAAG	1791
Mouse Oncostatin M Probe	TGGCGTATCTAGGGCTCCAAG	1792
Mouse Oncostatin M Invader	GTGTTCAAGTTTGGAGGCGGATAA	1793
FRET Probe	FI-ATTTC(CY3)TCTCAGA-3'NH2	1794
FRET Probe	FI-ATTTC(CY3)TCTCAGAC-3'NH2	1795
FRET Probe	FI-ATTTC(CY3)TCTCAGACT-3'NH2	1796
SRT	CAGTCTGAGATGAATGATACGCCAGG-3'NH2	1797
Mouse Oncostatin M Arrestor	<b>CTGGAGCCCTAGATA-NH2</b>	1798
Mouse Oncostatin M Arrestor	<b>CTGGAGCCCTAGAT-NH2</b>	1799
Mouse Oncostatin M Arrestor	<b>CTGGAGCCCTAGA-NH2</b>	1800
Mouse Oncostatin M Probe	CTGGCGTATCTAGGGCTCCA	1801
Mouse Oncostatin M Probe	CCTGGCGTATCTAGGGCTCCA	1802
Mouse Oncostatin M Invader	GTGTTCAAGTTTGGAGGCGGATAA	1803
SRT	CAGTCTGAGATGAATGATACGCCAGG-3'NH2	1804
Arrestor	<b>CTGGAGCCCTAGAT-NH2</b>	1805
Mouse Oncostatin M Probe	FI-CTCTCTCGTCTCTAGGGCTCCA	1806

Mouse Oncostatin M Probe	CTCTCTCGTCTCTIAGGGCTICCA	1807
Mouse Oncostatin M Invader	GTGTTTCAGGTTTTGGAGGCGGATAA	1808
SRT	CAGTCTGAGATGAATGAGACGAGAGAGT-NH2	1809
Mouse Oncostatin M Arrestor	CTTGGAGCCCTAGAG-NH2	1810
Mouse Oncostatin M Probe	FI- TGGCGTATCTIAGGGCTICCA	1811
Mouse Oncostatin M Probe	TGGCGTATCTIAGGGCTICCA	1812
Mouse Oncostatin M Invader	GTGTTTCAGGTTTTGGAGGCGGATAA	1813
Mouse Oncostatin M Probe	TGGCGTATCTICCCACAGAGAAA	1814
Mouse Oncostatin M Probe	TGGCGTATCTICCCACAGAGA	1815
Mouse Oncostatin M Invader	CACGTAGCCGATGAAGCGATGGTAA	1816
Mouse Oncostatin M Probe	TGGCGTATCTIATAGGGCTC	1817
Mouse Oncostatin M Invader	GTGTGTTTCAGGTTTTGGAGGCGGAA	1818
Mouse Oncostatin M Probe	CTCTCTCGTCTCTIACGGTTTIG	1819
Mouse Oncostatin M Invader	GGCAGCTCTCAGGTCAGGTGTGA	1820
Mouse Oncostatin M Invader	AGGCAGCTCTCAGGTCAGGTGTGA	1821
SRT	CAGTCTGAGATGAATGAGACGAGAGAGT-NH2	1822
FRET Probe	FI-ATTTC(CY3)TCTCAGAC-3'NH2	1823
Mouse Oncostatin M Arrestor	CAAAACCTGAAGAGA-3'NH2	1824
Mouse Oncostatin M Arrestor	CAAAACCTGAAGAGAC-3'NH2	1825
Mouse Oncostatin M Arrestor	CAAAACCTGAAGAGACG-3'NH2	1826
Mouse Oncostatin M Probe	FI- CTCTCTCGTCTCTTTCAGGTTTIG	1827
Mouse Oncostatin M Probe	CTCTCTCGTCTCTTTCAGGTTTIG-NH2	1828
Mouse Oncostatin M Invader	GGCAGCTCTCAGGTCAGGTGTGA	1829
Mouse Oncostatin M Stack	GAGGCGGATATAGGGCT- Biotin TEG	1830
<b>HUMAN ONCOSTATIN M</b>		
Human Oncostatin M Probe	CTCTCTCGTCTCTIAGGACTTA	1831
Human Oncostatin M Probe	CTCTCTCGTCTCTIAGGACTTAC	1832
Human Oncostatin M Invader	GAACACAGGAGTGCAAGGACACAGACA	1833
Human Oncostatin M Probe	TCACGTCTCTIACGGTTTIG	1834
Human Oncostatin M Probe	GTCACGTCTCTIACGGTTTIG	1835
Human Oncostatin M Probe	AGTCACGTCTCTIACGGTTTIG	1836
Human Oncostatin M Probe	CAGTCACGTCTCTIACGGTTTIG	1837
Human Oncostatin M Invader	AGGCAGCTCTCAGGTCAGGTGTGA	1838
FRET Probe 1	FI- CAAC(CY3)GCTTCCCTCCG	1839
SRT	CGGAGGAAGCAGTTGGAGACGTGACTGIGG-NH2	1840
SRT with mismatch	CGGAAGAAGCAGTTGGAGACGTGACTGIGG-NH2	1841
SRT with mismatch	CGGACGAAGCAGTTGGAGACGTGACTGIGG-NH2	1842

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bold indicates 2' o-methyl bases

Oligo Type	Oligo Sequence	Oligo #	SEQ ID NO
<b>SECONDARY SYSTEM:</b>			
<b>SET 1</b>			
FRET probe 1	5'-F-CAAC(CY3)GCTTCCTCCG-3'	DB04001F6	1843
secondary target	5'-CGGAAGAACAGTTGGTGC GCCCTCGTTAA-NH2	649-10-01	1844
<b>SET 2</b>			
FRET probe 1	5'-F-CAAC(CY3)GCTTCCTCCG-3'	DB04001F6	1845
secondary target	5'-CGGAAGAACAGTTGGAGGCCGTGACGGT-NH2-3'	641-60-03	1846
<b>h2C19 designs 2</b>			
probe	5'-AACGAGGCGCACGATGCCATCGA-NH2-3'	971-26-09	1847
stacker	5'-TTCTTGGTGTCTTTTACTTTCTC-3'	971-26-12	1848
invader	5'-GCAATCAATAAAGTCCCGAGGGTTGTTTC	971-26-11	1849
arrestor	5'-TCGATGGACATCGTGCGC-3'	971-26-10	1850
SET 1			
<b>h 2D6 p450 designs</b>			
probe	5'-CCGTCACGCCCTCTACCCCATCT-NH2-3'	971-11-01	1851
stacker	5'-CTGGTCGCCGCACCT-3'	971-11-04	1852
invader	5'-TGTAGGGCATGTGAGCCCTGGA-3'	971-11-03	1853
arrestor	5'-AGATGGGAGAGAGGCG-3'	971-11-02	1854
SET 2			
probe	5'-CCGTCACGCCCTCGAAGCCCTGT-NH2-3'	971-11-05	1855
stacker	5'-ACTTCGATGTCACGGGATGTCATATGG-3'	971-11-08	1856
invader	5'-GAGTGTCGTTCCCTTAGGGATGCCG-3'	971-11-08	1857
arrestor	5'-ACAGGGCTTCGAGGCG-3'	971-11-06	1858
SET 2			
probe	5'-CCGTCACGCCCTCCCTGCTGAGAAAAG-NH2-3'	971-11-09	1859
stacker	5'-GCAGGAAGCCCTCCG-3'	971-11-12	1860
invader	5'-CCCGAGGCATGCACGGCGGA-3'	971-11-11	1861
arrestor	5'-CTTTCTCAGCAGGAGGCG-3'	971-11-10	1862
SET 2			

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h 2D6 shroter designs

probe	5'-CCGTCACGCCCTCCCTGCTGAGAAA-HEX-3'	1051-12-06	1863
probe	5'-CCGTCACGCCCTCCCTGCTGAGAAA-3'	1051-12-05	1864
probe	5'-CCGTCACGCCCTCCCTGCTGAGAAA-NH2-3'	971-38-01	1865
invader	5'-CCCAGGCATGCACGGCGGA-3'	971-11-11	1866
stacker	5'-GGCAGGAAGCCTCC-3'	971-38-03	1867
arrestor	5'-TTTCTCAGCAGGGAGGCG-3'	971-38-02	1868
SET 2			

probe	5'-CCGTCACGCCCTCCCTGCTGAGA-NH2-3'	971-38-07	1869
invader		971-11-11	
stacker	5'-AAGCAGGAAGGCTCC-3'	971-38-09	1870
arrestor	5'-TCTCAGCAGGGAGGCG-3'	971-38-08	1871
SET 2			

probe	5'-CCGTCACGCCCTCCCTGCTGAGAA-NH2-3'	971-38-04	1872
invader		971-11-11	
stacker	5'-AGCAGGAAGGCTGG-3'	971-38-06	1873
arrestor	5'-TTCTCAGCAGGGAGGCG-3'	971-38-05	1874
SET 2			

probe	5'-CCGTCACGCCCTCCCTGCTGAGAAA-NH2-3'	971-11-09	1875
invader		971-11-11	
stacker	5'-GCAGGAAGGCTCCG-3'	971-11-12	1876
arrestor	5'-CTTTCTCAGCAGGGAGGCG-3'	971-11-10	1877
SET 2			

h 2B6 p450 alt. Splice designs

probe	5'-AACGAGGCGCACCATATCCC-NH2-3'	1051-48-01	1878
invader	5'-CCAGCGGTTTCCATTGGCAAAGATCAA-3'	971-01-03	1879
stacker	5'-CGGAAGAAATGGTCCGACCATG-3'	971-01-04	1880
arrestor	5'-GGGATATGGTGGTGGCG-3'	1051-48-02	1881
SET 1			

probe	5'-CCGTCACGCCCTCCACCATATCCC-HEX-3'	1051-12-02	1882
probe	5'-CCGTCACGCCCTCCACCATATCCC-3'	1051-12-01	1883
probe	5'-CCGTCACGCCCTCCACCATATCCC-NH2-3'	971-01-01	1884
invader		971-01-03	
stacker		971-01-04	
arrestor	5'-GGGATATGGTGGAGGCG-3'	971-01-02	1885

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SET 2

probe  
invader  
stacker  
arrestor  
SET 1

5'-AACGAGGGCGCACCAGAGCTGATGAG-NH2-3'  
5'-GAGAAGAGCTCAACACAGCTGGCCGAATAA-3'  
5'-TGAAAAAGTCTGGTAGAACAAAGTTCAGC-3'  
5'-CTCATCAGCTCTGGTGCGC-3'

1886  
1887  
1888  
1889

probe

5'-CCGTCACGCCCTCCAGAGCTGATGAG-NH2-3'

1890

SET 2

5'-CTCATCAGCTCTGGAGGCG-3'

1891

h 2B6 p450 alt. splice designs2

p  
l  
s  
a  
SET 1

5'-AACGAGGGCGCACCCCTTGGAATTC-NH2-3'  
5'-CTGTTCAATCTCCCTGTAGACTCTCTA-3'  
5'-CGAAGCTCCTCTATCAG-3'  
5'-GAAATCCAAGGGTGCGC-3'

1892  
1893  
1894  
1895

p  
l  
s  
a  
SET 2

5'-CCGTCACGCCCTCCCTTGGAATTC-NH2-3'

1896

5'-GAAATCCAAGGAGGCG-3'

1897

p  
l  
s  
a  
SET 1

5'-AACGAGGGCGCACTGAGGGCC-NH2-3'  
5'-GGAAGAGGAAGGTGGGTCCAA-3'  
5'-CCCTTGGATTTCCGAAG-3'  
5'-GGCCCTCAGTGCGC-3'

1898  
1899  
1900  
1901

p  
l  
s  
a  
SET 2

5'-CCGTCACGCCCTCTGAGGGCC-NH2-3'

1902

5'-GGCCCTCAGAGGCG-3'

1903

h2B6 p450 alt. Splice designs4

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probe	5'-AACGAGGGCGCACATACAGAGCTG-NH2-3'	1051-48-17	1904
invader	5'-GAGAAAGAGCTCAACAGCTGGCCGC-3'	1051-48-22	1905
stacker	5'-ATGAGTGAAAAGTCTGGTAGAAC-3'	1051-48-21	1906
arrestor	5'-CAGCTCTGTATTGTGGCG-3'	1051-48-18	1907
SET 1			
probe	5'-CCGTCACGCCCTCAATACAGAGCTG-NH2-3'	1051-48-19	1908
invader		1051-48-22	
stacker		1051-48-21	
arrestor	5'-CAGCTCTGTATTGAGGCG-3'	1051-48-20	1909
SET 2			
probe	5'-AACGAGGGCGCACGTTGAGGTTCTG-NH2-3'	1051-48-23	1910
invader	5'-CAGCAAAGAAAGCGAGAGCGTGTGAC-3'	1051-48-28	1911
stacker	5'-GTGGCTGAATTCACGTGTG-3'	1051-48-27	1912
arrestor	5'-CAGAACCTCAACCGTGGCG-3'	1051-48-24	1913
SET 1			
probe	5'-CCGTCACGCCCTCGGTTGAGGTTCTG-NH2-3'	1051-48-25	1914
invader		1051-48-28	
stacker		1051-48-27	
arrestor	5'-CAGAACCTCAACCGAGGCG-3'	1051-48-26	1915
SET 2			
h2B6 p450 designs			
probe	5'-CCGTCACGCCCTCCACCATATCCCCG-NH2-3'	971-01-06	1916
invader	5'-CCGTCACGCCCTCCACCATATCCC-NH2-3'	971-01-03	1917
stacker	5'-CGGAAGAATGGGTCGAC-3'	971-01-05	1918
stacker	5'-CGGAAGAATGGGTCGACCATG-3'	971-01-04	1919
arrestor	5'-GGGATATGGTGGAGGCG-3'	971-01-02	1920
SET 2			
probe	5'-CCAGCGGTTTCCATTGGCAAAGATCAA-3'	971-01-01	1921
invader		971-01-03	
arrestor	5'-CGGGGATATGGTGGAGGCG-3'	971-01-07	1922
SET 2			
probe	5'-CCGTCACGCCCTCCAGAGCTGATGAG-NH2-3'	971-01-08	1923
invader	5'-GAGAAAGAGCTCAACAGCTGGCCGAATAA-3'	971-01-10	1924
stacker	5'-TGAAAAAGTCTGGTAGAACAAAGTTCAGC-3'	971-01-11	1925

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arrestor SET 2	5'-CTCATCAGCTCTGGAGGCG-3'	971-01-09	1926
h2b6p450 designs 2			
probe	5'-CCGTCACGCCCTCAGATGACTGCC-NH2-3'	971-01-12	1927
invader	5'-GGAGAAAGGTCGGAATCTCTGAATCTCATC-3'	971-01-13	1928
stacker	5'-TCTGTGTATGGCATTGCTCGG-3'	971-01-14	1929
arrestor SET 2	5'-GGCAGTCATCTGAGGCG-3'	971-01-15	1930
h 2C19 designs 1			
probe	5'-CCGTCACGCCCTCCATCCTTAATATCTAT-NH2-3'	971-26-01	1931
invader	5'-GAGAGATTGGTTAAGGATTTGCTGAA-3'	971-26-03	1932
stacker	5'-CTGTAGGATATTTCCAATCACTGGG-3'	971-26-04	1933
arrestor SET 2	5'-ATAGATATTAAGGATGGAGGCG-3'	971-26-02	1934
probe	5'-AACGAGGCGCACCGTTCCAGGC-NH2-3'	971-26-05	1935
invader	5'-CATATCCATGCAGCACCCACCATGA-3'	971-26-07	1936
stacker	5'-CAAAATACAGAGTGAACACAGGGCC-3'	971-26-08	1937
arrestor SET 1	5'-GCCTGGAACGGTGCGC-3'	971-26-06	1938
h2C19 shorter site 2 designs			
probe	5'-AACGAGGCGCACCGTTCCAGG-NH2-3'	971-68-01	1939
invader	5'-CATATCCATGCAGCACCCACCATGA-3'	971-26-07	1940
stacker	5'-CCAAAATACAGAGTGAACACAGGGCC-3'	971-68-03	1941
arrestor SET 1	5'-CCTGGAACGGTGCGC-3'	971-68-02	1942
probe	5'-AACGAGGCGCACCGTTCCAGGC-NH2-3'	971-26-05	1943
probe	5'-AACGAGGCGCACCGTTCCAGGC-3'	1051-12-03	1944
probe	5'-AACGAGGCGCACCGTTCCAGGC-HEX-3'	1051-12-04	1945
invader	5'-CAAAATACAGAGTGAACACAGGGCC-3'	971-26-07	1946
stacker	5'-GCCTGGAACGGTGCGC-3'	971-68-04	1947
arrestor SET 1		971-26-05	
rat 1A1, rat 1A2 probe	Rat 1A1 site 1 bs. 639-700 5'-CCGTCACGCCCTCAGATTGACTATGCTG-NH2-3'	500-58-01	1948

invader stacker arrestor SET 2	5'-CAGTAACCTCCCAAACTCATTGCTTC-3' 5'-AGCAGCTCTTGGTCATCGT-3' 5'-CAGCATAGTCAATCTGAGGCG-3'	500-58-03 500-58-04 500-58-02	1949 1950 1951
rat 1A2 probe invader stacker arrestor SET 1	Rat 1A2 site 1 bs. 674-725 5'-AACGAGGCGCACTGACATTCTCCAC-NH2-3' 5'-GTCCACAGCATTCCTGAGGA-3' 5'-AAAGTCCTTGCTGCTCTTC-3' 5'-GTGGAGAAATGTCAGTGCGC-3'	500-58-05 500-58-07 500-58-08 500-53-06	1952 1953 1954 1955
rat 2B1-2B2 patent probe invader stacker arrestor SET 1	5'-AACGAGGCGCACTGGCTTGACACA-NH2-3' 5'-GTCAAATGTCTTGGAGCCAAA-3' 5'-GAGAAGTTCTGGAGGATGGTGG-3' 5'-TGTGTCAAGCCAGTGCGC-3'	500-49-05 500-49-03 r2B1, 2B2 500-49-07 500-49-06	1956 1957 1958 1959
probe invader stacker arrestor SET 1	5'-AACGAGGCGCACTGGCTTGACACAG-NH2-3' 5'-AGAAGTTCTGGAGGATGGTGG-3' 5'-CTGTGTCAAGCCAGTGCGC-3'	500-49-01 500-49-03 r2B1, 2B2 500-49-04 500-49-02	1960 1961 1962
rat 2B1-2B2 site 4 probe invader stacker arrestor SET 2	PROBE SET 2 (r2B1 bs 1299-1353, r2B2 bs. 474-528) 5'-AACGAGGCGCACGAGGAACAATTCATTT-NH2-3' 5'-GTTCTGGAGGATGGTGGTGAAGAAC-3' 5'-CGGGCAATGCCCTTCG-3' 5'-AAATGAATTGTTCTCTCGTGCGC-3'	500-49-12 500-49-10 500-49-14 500-49-13	1963 1964 1965 1966
probe invader stacker arrestor SET 1	5'-AACGAGGCGCACGAGGAACAATTCATTT-NH2-3' 5'-GGGCAATGCCCTTCG-3' 5'-GAAATGAATTGTTCTCTCGTGCGC-3'	500-49-08 500-49-10 500-49-11 500-49-09	1967 1968 1969
rat 2B1-2B2 ,5 patent probe	5'-AACGAGGCGCACAGCTGAGAAAGCAG-NH2-3'	500-49-15	1970

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invader	5'-GCCTCAGCCGGATCACCGC-3'	r2B1, 500-49-17	1971
invader	5'-GCCTCAGCCCGATCACCGC-3'	r2B2, 500-49-18	1972
stacker	5'-ATCTGGTACGTTGGAGGTATT-3'	r2B1 500-49-20	1973
stacker	5'-ATCTGGTATGTTGGAGGTATT-3'	r2B2 500-49-21	1974
arrestor	5'-CTGCTTCTCAGCTCTGCGC-3'	500-49-16	1975

NOTE: all 3 invader/probe sets are designed to detect both 2B1 and 2B2

SET 1

rat 2E1 p450 (af061442) 500-73	Rat 2E1 PROBE SET (570C)		
p	5'-CCGTCACGCCCTCGTCGAAACGTTTGTGTT-NH2	500-40-04	1976
i	5'-CCTCAGACACTTCTTGTCATTGTAC-3'	500-40-02	1977
s	5'-GAAGAGGATATCCGCAATGACATTGC-3'	500-40-05	1978
a	5'-AACAAACGTTTCGACGAGGCGG-3'	500-40-06	1979

SET 2

p	5'-CCGTCACGCCCTCGTCGAAACGTTTGTGTTGAAG-NH2-3'	500-40-01	1980
i		500-40-02	
s		500-40-05	1981
a	5'-CTTCAACAACGTTTCGACGAGGCGG-3'	500-40-03	

SET 2

rat 2E1 p450 (af061442) 500-73	Rat 2E1 PROBE SET (822G) (designed over splice junction #5)		
p	5'-CCGTCACGCCCTCCTCATCTCTATG-NH2-3'	500-40-10	1982
i	5'-GTTCTTGCGTGTTTTCCTTA-3'	500-40-08	1983
s	5'-AGGAGACAGTCAGTCACATC-3'	500-40-11	1984
a	5'-CATAGAGATGGAGGAGGCGG-3'	500-40-12	1985

SET 2

p	5'-CCGTCACGCCCTCCTCATCTCTATGAG-NH2-3'	500-40-07	1986
i		500-40-08	
s		500-40-11	1987
a	5'-CTCATAGAGATGGAGGAGGCGG-3'	500-40-09	

SET 2

Rat 2E1 PROBE SET (969G)	Designed over splice junction #6		
probe	5'-CCGTCACGCCCTCCTCTTCAATTTCTG-HEX-3'	1073-19-06	1988
invader	5'-CCCTGTCAATTTCTTCATGAAGTTTA-3'	500-40-14	1989
stacker	5'-GGTATTTTCATGAGGATCAGGAGC-3'	500-40-17	1990
arrestor	5'-CCAGAAATTGAAGAGGAGGCGG-3'	500-40-15	1991

SET 2

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probe	5'-CCGTCACGCCCTCCTCTTCAATTTCTG-3'	1073-19-05	1992
probe	5'-CCGTCACGCCCTCCTCTTCAATTTCTG-NH2-3'	500-40-16	1993
probe	5'-CCGTCACGCCCTCCTCTTCAATTTCTGG-NH2	500-40-13	1994
invader		500-40-14	
stacker		500-40-17	1995
arrestor		500-40-18	
SET 2			
Rat 2E1 PROBE SET (969G)			
probe	Designed over splice junction #6	500-73-01	1996
invader	5'-CCCTGTCAATTTCTTCATGAAGTTTA-3'	500-40-14	1997
stacker	5'-GGGTATTTTCATGAGGATCAGGAG-3'	500-73-03	1998
arrestor	5'-AGAAATTGAAGAGGAGGCG-3'	500-73-02	1999
SET 2			
rat 3A's design 2			
probe	5'-CCGTCACGCCCTCGTTCCTGGGT-NH2-3'	500-43-15	2000
invader	5'-GAGCAAACCTCATGCCAATGCAC-3'	r3A1, 3A18 500-43-23	2001
invader	5'-GAGCAAACCTCATGTCAATGCAC-3'	r3A2 500-43-24	2002
invader	5'-GAGCAAACCTCATGCCAATACAC-3'	r3A2 500-43-24	2003
stacker	5'-CCATTTCCAAAGGCGAG-3'	short r3A1, 3A2, 3A18 500-43-19	2004
stacker	5'-CCATTTCCAAAGGCGAG-3'	short r3A9 500-43-20	2005
arrestor	5'-ACCCAGGAACGAGGCG-3'	500-43-16	2006
SET 2			
probe	5'-CCGTCACGCCCTCGTTCCTGGGT-NH2-3'	500-43-13	2007
invader		r3A1, 3A18 500-43-23	
invader		r3A2 500-43-24	
arrestor		500-43-14	2008
SET 2			
rat 3A's desing 3			
probe	5'-CCGTCACGCCCTCTGAGAGCAAACCT-NH2-3'	500-43-29	2009
invader	5'-AGAGCGAGTTTCATATTCAA-3'	r3A1, 3A2 500-43-35	2010
invader	5'-AGAGCAAACCTTCATGTTCAA-3'	r3A9 500-43-36	2011
invader	5'-ACAGCAAAGTTTCATGCTGAA-3'	r3A18 500-43-37	2012
stacker	5'-CATGCCAATGCAGTTCCTG-3'	r3A1, 3A18 500-43-31	2013
stacker	5'-CATGTCAATGCAGTTCCTG-3'	r3A2 500-43-32	2014
stacker	5'-CATGCCAATACAGTTCCTG-3'	r3A9 500-43-33	2015

arrestor SET 2	5'-AGGTTTGCTCTCCGAGGCG-3'	500-43-30	2016
probe invader invader invader arrestor SET 2	5'-CCGTCACGCCCTCTGAGAGCAAACCTCA-NH2-3'	500-43-27 r3A1, 3A2 500-43-35 r3A9 500-43-36 r3A18 500-43-37 500-43-28	2017
	5'-TGAGGTTTGCTCTCAGAGGCG-3'		2018
rat 3A's designs probe invader invader invader s s a SET 2	5'-CCGTCACGCCCTCGGAACATCTCCT-NH2-3' 5'-TGCTCCATACTGTTCAATGATGGC-3' 5'-TATCTGTATACTGGTTAATGATGGC-3' 5'-TATCTCCATACTGTCTCATGAGGGC-3' 5'-TGAGTCTTCCACTGGTG-3' 5'-TGAGCTTCCCACTGGTG-3' 5'-TGAGTTTGCCACTGGTG-3'	500-43-03 r3A1, 3A2 500-43-09 r3A9 500-43-10 r3A18 500-43-11 r3A1, 3A2 500-43-05 r3A9 500-43-06 r3A18 500-43-07	2019 2020 2021 2022 2023 2024 2025
probe invader invader invader arrestor SET 2	5'-CCGTCACGCCCTCGGAACATCTCCTTGA-NH2-3'	500-43-01 r3A1, 3A2 500-43-09 r3A9 500-43-10 r3A18 500-43-11 500-43-02	2026
	5'-TCAAGGAGATGTTCCGAGGCG-3'		2027
rat 3A's design 2b probe invader invader invader stacker stacker arrestor SET 2	5'-CCGTCACGCCCTCGTTCCTGGG-NH2-3' 5'-GAGCAAAACCTCATGCCAATGCAC-3' 5'-GAGCAAAACCTCATGTCAATGCAC-3' 5'-GAGCAAAACCTCATGCCAATACAC-3' 5'-TCCATTCCCAAAGGCGAG-3' 5'-TCCATTCCCAAAGGCGAG-3' 5'-CCGAGGAACGAGGCG-3'	991-39-01 r3A1, 3A18 500-43-23 r3A2 500-43-24 r3A9 500-43-25 r3A1, 3A2, 3A18 991-39-03 r3A9 991-39-04 991-39-02	2028 2029 2030 2031 2032 2033 2034
rat or human 1A1 shorter site 2 probe probe	5'-CCGTCACGCCCTCCTGTCTGTGAT-HEX-3' 5'-CCGTCACGCCCTCCTGTCTGTGAT-3'	1073-19-02 1073-19-01	2035 2036

probe	5'-CCGTCACGCCCTCCTGTCTGTGAT-NH2-3'	991-12-04	2037
invader	5'-TCCTGACAATGCTCAATGAGGA-3'	r 1A1 500-53-11	2038
invader	5'-TCCTGACAGTGCTCAATCAGGA-3'	h 1A1 500-53-12	2039
stacker	5'-GTCCCGGATGTGGCCC-3'	rat/human 1A1 991-12-06	2040
arrestor	5'-ACATCACAGACAGGAGGCG-3'	500-53-10	2041
SET 2			
probe	5'-CCGTCACGCCCTCCTGTCTGTGATG-NH2-3'	991-12-01	2042
invader		r 1A1 500-53-11	
invader		h 1A1 500-53-12	
stacker	5'-TCCCGGATGTGGCCCT-3'	rat/human 1A1 991-12-03	2043
arrestor	5'-CATCACAGACAGGAGGCG-3'	991-12-02	2044
SET 2			
probe	5'-CCGTCACGCCCTCCTGTCTGTGATGT-NH2-3'	500-53-09	2045
invader		r 1A1 500-53-11	
invader		h 1A1 500-53-12	
stacker	5'-GTCCCGGATGTGGCCC-3'	rat/human 1A1 991-12-06	2046
arrestor	5'-ATCACAGACAGGAGGCG-3'	991-12-05	2047
SET 2			
rat or human 1A1 site 1			
probe	5'-CCGTCACGCCCTCCTGTGGCCCTTC-NH2-3'	500-53-04	2048
invader	5'-CTGTCTGTGATGTCCCGGATGA-3'	500-53-03	2049
stacker	5'-TCAAAATGCTCTGTAGTGCTC-3'	rat 1A1 500-53-06	2050
stacker	5'-TCAAAAGGTTTTGTAGTGCTC-3'	human 1A1 500-53-07	2051
arrestor	5'-GAAGGGCCAGAGGCG-3'	500-53-05	2052
SET 2			
probe	5'-CCGTCACGCCCTCCTGTGGCCCTTCTC-NH2-3'	500-53-01	2053
invader		500-53-03	
arrestor	5'-GAGAAAGGGCCAGAGGCG-3'	500-53-02	2054
SET 2			
Rat/Human 1A1 site 2			
probe	5'-CCGTCACGCCCTCCTGTCTGTGATGT-NH2-3'	500-53-09	2055
invader	5'-TCCTGACAATGCTCAATGAGGA-3'	r 1A1 500-53-11	2056
invader	5'-TCCTGACAGTGCTCAATCAGGA-3'	h 1A1 500-53-12	2057
stacker	5'-CCCCGGATGTGGCCCT-3'	rat/human 1A1 500-53-14	2058
arrestor	5'-ACATCACAGACAGGAGGCG-3'	500-53-10	2059

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SET 2

rat or human 1A2 sites

probe

probe

probe

invader

invader

arrestor

SET 1

5'-AACGAGGCGCACGGACTGTTTTCTGC-HEX-3'  
 5'-AACGAGGCGCACGGACTGTTTTCTGC-3'  
 5'-AACGAGGCGCACGGACTGTTTTCTGC-NH2-3'  
 5'-CTTGTGAAGTCTTGATAGTGTTCCTC-3'  
 5'-CTTGTCAAAGTCTGATAGTGTTCCTC-3'  
 5'-GCAGAAAACAGTCCGTGCGC-3'

1073-19-04  
 1073-19-03  
 500-53-15  
 rat 1A2 500-53-17  
 human 1A2 500-53-18  
 500-53-16

2060  
 2061  
 2062  
 2063  
 2064  
 2065

shorter h2C19 design site 3

probe

invader

stacker

arrestor

SET 1

5'-AACGAGGCGCACGGATGTCCATCG-NH2-3'  
 5'-GCAATCAATAAGTCCCGAGGGTTGTTC-3'  
 5'-ATTCTTGGTGTCTTTTACTTTCTC-3'  
 5'-CGATGGACATCGTGCGC-3'

971-48-01  
 971-26-11  
 971-48-03  
 971-48-02

2066  
 2067  
 2068  
 2069

Human IL-10

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	SEQ ID NO
probe	aacgaggcgccacaaactcactcatggct-NH2	511-31-01	FV-1 & FV-2	3' amine	2070
arrestor	agccatgagtgagttgttgccg	511-31-02		All 2'Ome + 3' amine arrestor for 511-31-01	2071
probe	aacgaggcgccacaaactcactcatggc-NH2	511-30-01	FV-1 & FV-2	3' amine	2072
arrestor	gccatgagtgagttgttgccg	511-30-02		All 2'Ome + 3' amine arrestor for 511-30-01	2073
arrestor	gccatgagtgagttgttgccg	380-89-02		All 2'Ome Same as 380-82-02	2074
arrestor	gccatgagtgagttgttgccg	380-89-04		All 2'Ome Same as 380-82-04	2075
arrestor	gccatgagtgagttgttgccg	380-89-06		All 2'Ome Same as 380-82-06	2076
arrestor	gccatgagtgagttgttgccg	380-89-08		All 2'Ome Same as 380-82-08	2077
probe	aacgaggcgccacaaactcactcatgg-NH2	511-67-01	FV-1 & FV-2	3' amine	2078
stacker	ctttgacatgcctctcttgagcc	781-79-01		stacker for 511-67-01 All 2'Ome	2079
arrestor	ccatgagtgagttgttgccg	781-79-02		all 2'Ome arrestor for 511-67-01	2080
probe	aacgaggcgccacaaactcactcatg-NH2	781-80-01	FV-1 & FV-2	3' amine	2081
stacker	gctttgacatgcctctcttgag	781-80-02		stacker for 781-80-01 All 2'Ome	2082
arrestor	catgagtgagttgttgccg	781-80-03		all 2'Ome arrestor for 781-80-01	2083
probe	aacgaggcgccacaaactcactcat-NH2	781-81-01	FV-1 & FV-2	3' amine	2084
stacker	ggctttgacatgcctctcttgga	781-81-02		stacker for 781-81-01 All 2'Ome	2085
stacker	ggctttgacatgcctctcttgga	938-74-01		stacker for 781-81-01 All 2'Ome to replace 781-81-02	2086
arrestor	atgagtgagttgttgccg	781-81-03		all 2'Ome arrestor for 781-81-01	2087
probe	ccgtcacgcctccaaactcactcat-NH2	938-46-02	MO4-1/MO4-2/MO4-3	same as 938-46-01 w/ 3' amine	2088
arrestor	atgagtgagttgttgccg	938-46-03		all 2'Ome arrestor for 938-46-01&02	2089
invader	taggctctatgagtgatgaagatgta	380-59-02			2090
invader	giccatgaggctctctatgagttgtaagatgta	511-32-01		longer invader 380-59-02	2091

Mouse IL-4

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	aacgaggcgccactctctctggaacctcg	511-14-01	FV-1 & FV-2		2092
arrestor	cgagggtcacaggagagtgccg	511-14-02		All 2'-Ome + 3' amine arrestor for 511-14-01	2093
probe	aacgaggcgccactctctctggaacct-NH2	511-12-01	FV-1 & FV-2	458-34-01 with 3' amine	2094
arrestor	agggtcacaggagagtgccg	511-02-01		All 2'-Ome + 3' amine arrestor for 458-34-01	2095
probe	cagtcacgtctctctctggaacct-NH2	511-16-01	MO2	3' amine	2096
arrestor	agggtcacaggagagagagac	511-16-02		All 2'-Ome + 3' amine arrestor for 511-16-01	2097
arrestor	agggtcacaggagagagac	511-50-01	MISC-1	All 2'-Ome + 3' amine arrestor for 511-16-01	2098
probe	aaccagtcgtacgtctctctggaacct	458-35-01		All 2'-Ome + 3' amine arrestor for 458-35-01	2099
arrestor	agggtcacaggagagaglac	511-03-01	MISC-1		2100
probe	ccagtcgtacgtctctctggaacct	458-35-02		All 2'-Ome + 3' amine arrestor for 458-36-01	2101
probe	agggtcacaggagagtgccg	511-04-01	MISC-2		2102
probe	aaccacccgcactctctctggaacct	458-36-01	FV-1 & FV-2		2103
probe	aacgaggcgccactctctctggaacct	511-13-01			2104
arrestor	gggtcacaggagagtgccg	511-13-02			2105
probe	aacgaggcgccactctctctgga-NH2	781-71-01	FV-1 & FV-2	3' amine	2106
stacker	ctctgggttcaaaatgccgatgactctc	781-71-02		All 2'-Ome for 781-71-01	2107
arrestor	tcacaggagagtgccg	781-71-03		All 2'-Ome arrestor for 781-71-01	2108
Invader	atccatctcgtgcagtggtccctta	380-32-01		Same as 380-32-01 but underlined base is mismatch to sequence	2109
Invader	atccatctcgtgcagtggtccctta	380-32-02			2110
probe	aacgaggcgccacccctctctctggaacct-NH2	511-44-01	FV-1 & FV-2		2111
arrestor	gtcacaggagagaggggtgccc	511-44-02		All 2'-Ome + 3' amine arrestor for 511-44-01	2112
probe	aacgaggcgccacccctctctctg-NH2	511-68-01	FV-1 & FV-2	3' amine	2113
arrestor	acaggagagaggggtgccc	511-68-02		All 2'-Ome + 3' amine arrestor for 511-68-01	2114
invader	ggcacatccatctcgtgcagtgccgta	511-45-01			2115
probe	ccgtcacgcctctctctctggaacctgt-NH2	511-46-01	MO4-1/MO4-2/MO4-3	3' amine	2116

arrestor	acgaggtcacagagagggc	511-46-02	MO4-1/MO4-2/MO4-3	All 2'-Ome + 3' amine arrestor for 511-46-01	2117
probe	ccgtcacgctctctctctct-NH2	511-69-01		3' amine	2118
arrestor	gaggtcacagagagggc	511-69-02		All 2'-Ome + 3' amine arrestor for 511-69-01	2119
probe	ccgtcacgctctctctctct-NH2	781-68-01	MO4-1/MO4-2/MO4-3	3' amine	2120
stacker	tcggttcaaaatgcgagatctctca	781-68-02		All 2'Ome stacker for 781-68-01	2121
arrestor	gggtcacagagagggg	781-68-03		All 2'-Ome arrestor for 781-68-01	2122
probe	ccgtcacgctctctctctct-NH2	781-69-01	MO4-1/MO4-2/MO4-3	3' amine	2123
stacker	ctcggttcaaaatgcgagatctctca	781-69-02		All 2'Ome stacker for 781-69-01	2124
arrestor	gtcacagagagggc	781-69-03		All 2'-Ome arrestor for 781-69-01	2125
invader	acatccatctccgtgcagcgctcccta	511-47-01			2126
probe	cagtcacgctctctctctct-NH2	511-17-01	MO2	3' amine	2127
arrestor	aggagaaggagagagc	511-17-02		All 2'-Ome + 3' amine arrestor for 511-17-01	2128
invader	gcacatccatctccgtgcagcgga	511-18-01			2129
probe	ccgccgagatcactccgtgacc-NH2	781-83-01	TT-1/TT-2	3' amine	2130
arrestor	gggtcacagagatc	781-83-02		All 2' Ome arrestor for 781-83-01	2131
probe	ccgtcacgctctctctgacc-NH2	781-82-01	MO4-1/MO4-2/MO4-3	3' amine	2132
invader	ccgtgcagtgccgtccctca	781-82-02			2133
arrestor	gggtcacagagagggc	781-82-03		All 2' Ome arrestor for 781-82-01	2134
probe	ccgtcacgctctctctgacc-NH2	781-84-01	MO4-1/MO4-2/MO4-3	3' amine	2135
invader	cggtgcagtgccgtccctca	781-84-02			2136
arrestor	gggtcacagagagggc	781-84-03		All 2' Ome arrestor for 781-84-01	2137

## Mouse IL-2

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	cagtcacgctctctctgtaaacacagttactct-NH2	511-19-01	MO2	3' amine	2138
arrestor	agagtaactgtgtgtaaaacaaagagagc	511-19-02		All 2'-Ome + 3' amine arrestor for 511-19-01	2139
invader	gcactcaaatgtgtgtcagagccca	511-20-01			2140

## Mouse IFN-γ

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	cagtcacgctctctctgtccagttcc-NH2	511-24-01	MO2	3' amine	2141
arrestor	ggaactggcacaagagagagc	511-24-02		All 2'-Ome + 3' amine arrestor for 511-24-01	2142
probe	cagtcacgctctctctgtccagttcc-NH2	511-23-01	MO2	3' amine	2143
arrestor	gaactggcacaagagagagc	511-23-02		All 2'-Ome + 3' amine arrestor for 511-23-01	2144
probe	cagtcacgctctctctgtccagttcc-NH2	511-21-01	MO2	3' amine	2145
arrestor	aactggcacaagagagagc	511-21-02		All 2'-Ome + 3' amine arrestor for 511-20-01	2146
invader	gcctgcagagattcagtcaccaa	511-22-01			2147

## Human TNF-α

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	ccgccgagatcactctgactcgtc-NH2	511-77-01	TT-1/TT-2	3' amine (based on 685-27-01-1 base shorter)	2148
arrestor	caggcagtcagagtgatctcgg	511-77-02		All 2'-Ome + 3' amine arrestor for 511-77-01	2149
probe	ccgccgagatcactctgactcgtc-NH2	511-78-01	TT-1/TT-2	3' amine (based on 685-27-01-2 bases shorter)	2150
arrestor	aggcagtcagagtgatctcgg	511-78-02		All 2'-Ome + 3' amine arrestor for 511-78-01	2151
invader	ctt gtc act cgg ggt tgc aga aga tga a	685-28-01			2152

## Human IL-1β

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	gccgtcacgctctctctgttagggcc-NH2	511-79-01	MO4-1/MO4-2/MO4-3	3' amine (based on 685-21-01)	2153

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arrestor	ggccctaaacagatgagaggcgt	511-80-01	All 2'-Ome + 3' amine arrestor for 511-79-01	2154
arrestor	ggccctaaacagatgagaggcgtga	511-80-02	All 2'-Ome + 3' amine arrestor for 511-79-01	2155
invader	caggtctggaaggagcacia	685-23-01		2156

## Human IL-6

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	gcgcgtcacgcctctctcattgaatcc-NH2	511-81-01	MO4-1/MO4-2/MO4-3	3' amine (based on 685-16-01)	2157
arrestor	aggattcaatgagagagagcgtga	511-82-01		All 2'-Ome + 3' amine arrestor for 511-81-01	2158
arrestor	aggattcaatgagagagagcgt	511-82-02		All 2'-Ome + 3' amine arrestor for 511-81-01	2159
probe	ccgtcacgcctctctcattgaatcc-NH2	781-27-01	MO4-1/MO4-2/MO4-3	3' amine (511-81-01 with new arm)	2160
arrestor	aggattcaatgagagagagcgt	781-27-02		All 2'-Ome + 3' amine arrestor for 781-27-01	2161
probe	gcgcgtcacgcctctctcattgaatcc-NH2	511-83-01	MO4-1/MO4-2/MO4-3	3' amine (based on 685-16-01)	2162
arrestor	ggattcaatgagagagagcgtga	511-84-01		All 2'-Ome + 3' amine arrestor for 511-81-01	2163
arrestor	ggattcaatgagagagagcgt	511-84-02		All 2'-Ome + 3' amine arrestor for 511-81-01	2164
probe	gcgcgtcacgcctctctcattgaatcc-NH2	781-28-01	MO4-1/MO4-2/MO4-3	3' amine (511-83-01 with new arm)	2165
arrestor	ggattcaatgagagagagcgt	781-28-02		All 2'-Ome + 3' amine arrestor for 781-28-01	2166
probe	ccgtcacgcctctctcattgaatcc-NH2	781-29-01	MO4-1/MO4-2/MO4-3	3' amine (1 base shorter than 781-28-01)	2167
arrestor	ggattcaatgagagagagcgt	781-29-02		All 2'-Ome + 3' amine arrestor for 781-29-01	2168
probe	ccgcgcagatcactctcattgaatcc-NH2	781-30-01	TT-1/TT-2	3' amine (781-29-01 with new arm)	2169
arrestor	gattcaatgagagagagcgtc	781-30-02		All 2'-Ome + 3' amine arrestor for 781-30-01	2170
invader	cca aaa gtc cag tga tga ttt tca cca ggc aag a	685-18-01			2171

## Secondary Cassettes

SRT	cggaggagcagtggtgctgcctctgtaaaNH2	277-68-05	FV-1		2172
FRET probe	Fcaac(Cy3)gctctctcgc	187-46-01			2173
SRT	ccaggagcaagtggtgctgcctctggtt	996-29-01	FV-2		2174
FRET probe	Fcac(Z21)gctctctggtg	767-29-02			2175
SRT	cggagaagcagtggtgagggcgagcgtNH2	641-60-03	MO4-1		2176
FRET probe	Fcaac(Cy3)gctctctcgc	187-46-01			2177
SRT	cggagaagcagtggtgagggcgagcgtNH2	562-93-01	MO4-2		2178
FRET probe	Fcaac(Cy3)gctctctcgc	187-46-01			2179
SRT	ccaggagaagcagtggtgagggcgagcgtNH2	996-29-02	MO4-3		2180
FRET probe	Fcac(Z21)gctctctggtg	767-29-02			2181
SRT	cggagaagcagtggtgagggcgagcgtNH2	562-92-01	TT-1		2182
FRET probe	Fcaac(Cy3)gctctctcgc	187-46-01			2183
SRT	cggagaagcagtggtgagggcgagcgtNH2	685-56-01	TT-2		2184
FRET probe	Fcaac(Cy3)gctctctcgc	187-46-01			2185
SRT	gtactgagatgaaggagagcgtgactgtanNH2	491-68-02	MO2		2186
FRET probe	Fcttc(Cy3)ctcagtagc	491-68-01			2187
SRT	cgg agg aag cgg ttg cgt acg act ggttaa-NH2	458-35-03	MISC-1		2188
FRET probe	Fcaac(Cy3)gctctctcgc	187-46-01			2189
SRT	cgg agg aag cgg ttg gtt cgg gtt ggtg-PO3	441-31-02	MISC-2		2190
FRET probe	Fcaac(Cy3)gctctctcgc	187-46-01			2191

Oligo sequence descriptions: 5' to 3' direction, 2'-Ome nts are bolded and underlined, internal modifications defined in ( )

FRET Oligo/SRT Combinations

Set	FRET Oligo	SRT
Set 1	187-46-01	641-60-02
Set 2	187-46-01	690-82-03
Set 3	307-70-02	339-50-03
Set 4	303-18-05	343-63-07
Set 5	303-18-05	343-25-01
Set 6	187-46-01	649-10-01
Set 7	744-80-03	277-068-05N
Set 8	187-46-01	833-18-07
Set 9	767-28-03	777-71-10
Set 10	767-29-02	996-29-01
Set 11	1067-20-01	996-29-01
Set 12	307-70-02	307-70-04
Set 13	491-01-01	491-02-04
Set 14	187-46-01	562-84-01

FRET Oligos

Oligo #	Oligo Sequence
187-46-01	Fam-CAAC(CY3)GCTTCCTCCG
307-70-02	Fam-ATTC(CY3)TCTCAGAC-NH2
303-18-05	Fam-TAAC(CY3)GCTTCCTCCG
744-80-03	Fam-CAA(Dabcyl)TGCTTCCTCCG
767-28-03	Red Dye-CTC(Z-21)TCTCAGTGCG
767-29-02	Fam-CAC(Z-21)TGCTTCGTGG
1067-20-01	Fam-CAC(Z-28)TGCTTCGTGG
491-01-01	Fam-CTTC(CY3)TCTCAGAC

SEQ ID NO
2192
2193
2194
2195
2196
2197
2198
2199

SRT

Oligo #	Oligo Sequence
641-60-02	CGGAGGAAGCAGTTGGAGCGTGACGGT-NH2
690-82-03	CGGAGGAAGCAGTTGTGGCGGTGACGGT
339-50-03	CAGTCTGAGATGAATGAGACGAGAGAGT-NH2
343-63-07	CGGAGGAAGCGGTTAGTCTGCCACGICAT-NH2
343-25-01	CGGAGGAAGCAGTTGGTGGCGCTCGTTAA-NH2
649-10-01	CGGAGGAAGCAGTTGGTGGCGCTCGTTAA-NH2
277-068-05N	CGGAGGAAGCAGTTGGCGCGTGCGGCT-NH2
833-18-07	CGGAGGAAGCAGTTGGCGCGTGCGGCT-NH2
777-71-10	CGGAGGAAGCAGTTGGCGCGTGCGGCT-NH2
996-29-01	CCAGGAAGCAAGTGGTGGCGCTCGUUU
307-70-04	CAGTCTGAGATGAATGATACGCCAGG-NH2
491-02-04	AGTCTGAGATGAAGGAGACGTGACTGTGG-NH2
562-84-01	CGGAGGAAGCGGTTGGTATCTCGGCG-NH2

SEQ ID NO
2200
2201
2202
2203
2204
2205
2206
2207
2208
2209
2210
2211
2212

Oligo Type	Oligo #	Oligo Sequence	Notes	Position	SEQ ID NO
Human IL-2					
Probe	196-56-01	TCTGTGGCGTATCCTTCTTGGGCATGTAA		Splice Junction 2	2213
Probe	196-56-02	GTGGCGTATCCTTCTTGGGCATGTAA			2214
Probe	196-56-03	GCGTATCCTTCTTGGGCATGTAA			2215
Invader	128-93-02	GAAGATGTTTCAGTTCGTGG(ddC)	ddC = dideoxy C		2216
Capture Oligo	145-030-05	AAAAAGATACGCCACAGAACACG(BIOTIN-da)TT			2217
Probe	315-28-01	TGGCGTATCTTAATTCATTCAAAAT		Splice Junction 1	2218
Invader	315-28-02	TGGGAGTTGGGATTCITGTAATTAA			2219

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Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dTTC	2220
Probe	315-29-01	TGGCGTATCTAATTATTATCCATTC	2221
Invader	315-29-02	ATCCTGGTGAGTTGGGATCTTGA	2222
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dTTC	2223
Probe	315-29-03	TGGCGTATCTTCCATTCAAAATCATC	2224
Invader	315-29-04	GTTTGGGATCTTGTAAATTATAAA	2225
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dTTC	2226
Probe	315-30-01	GTGGCGTATCTTCTTGGGCAT	2227
Invader	315-30-02	GAAGATGTTTTCAGTTTCTGTGGC	2228
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dTTC	2229
Human b-actin			
Probe	315-26-01	TGGCGTATCTCTGGGTCACTCTTC	2230
Invader	315-26-02	GGGTGTTGAAGGTCCTCAACATGAA	2231
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dTTC	2232
Probe	315-27-01	TGGCGTATCTCTTGGTCTTCAATTGT	2233
Invader	315-27-02	ACTTGGCTCAGGAGGAGCAATGAA	2234
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dTTC	2235
Probe	315-91-01	TGGCGTATCTGATCTGGGTCACTCT	2236
Invader	315-91-02	TGGCTGGGTGTTGAAGGTCCTCAACAA	2237
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dTTC	2238
Probe	315-92-01	ACCCGTATCTGCCAGGAAGGA	2239
Invader	315-92-02	AGTTTCGTGGATGCCACAGGAGACCAA	2240
Invader	315-92-03	AGTTTCGTGGATGCCACAGGAGACCAA	2241
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dTTC	2242
Probe	340-32-01	TGGCGTATCTCTCAACATGATCT	2243
Invader	340-32-02	ACGTACATGGCTGGGTGTTGAAGGA	2244
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dTTC	2245
Probe	340-33-01	TGGCGTATCTGATCTGGGTCACT	2246
Invader	340-33-02	TGGCTGGGTGTTGAAGGTCCTCAACAA	2247
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dTTC	2248
Probe	740-01-01	CCGTCACGCTCGCCTTGGGGTTC	2249
Invader	740-01-02	TCTGGGTCACTCTTCGCGGTGTA	2250
Arrestor	740-01-03	<b>GAACCCCAAGGCGAGGCGGI</b>	2251
Secondary Cassette		Set 1	
Probe	740-01-08	CCGTCACCGCCATGGGTCACTTCT	2252
Stacker	740-01-04	CGCGGTGGCCTTGGGGT	2253
Invader	740-01-06	CTGGGGTGTGAAGGTCCTCAACATGATCC	2254
Arrestor	740-01-09	<b>AGAAAGATGACCAATGGCGG</b>	2255
Secondary Cassette		Set 2	
Mouse GAPDH			
Probe	425-59-01	Fl-CTCTCTCGTCTCTCTGGAAGA	2256
Invader	425-59-02	ATTGTAGTGTAGTGGGTCTCGCA	2257
Probe	425-60-01	Fl-CTCTCTCGTCTCTGTCACAATC	2258
Invader	425-60-02	GCAGTTGGTGGTGCAGGATGCATA	2259
Probe	425-61-01	Fl-CTCTCTCGTCTCTACCAAGAAATG	2260
Invader	425-61-02	GCTGTAGCCGATTCATTGTCAA	2261
Probe	425-80-01	Fl-CTCTCTCGTCTCTCTCTGGAAG	2262
Invader	425-80-02	CATTGTAGTGTAGTGGGTCTCGA	2263
Probe	425-87-01	CTCTCTCGTCTCTCTCTGGAAGA	2264
Invader	425-59-02	ATTGTAGTGTAGTGGGTCTCGCA	2265
Arrestor	425-87-04	<b>ICTTCCAGGAGAGACG</b>	2266
Secondary Cassette		Set 3	
Probe	425-87-02	CTCTCTCTCTCTCTCTCTGGAAG	2267
Invader	425-80-02	CATTGTAGTGTAGTGGGTCTCGA	2268
Splice Junction 1			
Splice Junction 1			
Splice Junction 2			
Splice Junction 3			
Splice Junction 5			
Splice Junction 3			
Splice Junction 4			
Splice Junction 3			
Splice Junction 3			
Splice Junction 3			
Splice Junction 4			
Splice Junction 6			
Splice Junction 8			
Splice Junction 4			
Splice Junction 4			
Splice Junction 4			
Splice Junction 4			

Fl = Fluorescent

Fl = Fluorescent

Fl = Fluorescent

Same as 425-59-01 without Fluorescent

Same as 425-80-01 without Fluorescent

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Arrestor	425-87-05	<b>CITCCAGGAGGAGACG</b>	2269
Secondary Cassette		Set 3	
Probe	425-87-03	CTCTCTCGTCTCTACAGGAAATG	2270
Invader	425-61-02	GCTGTAGCCGTATTCATTGTCAA	2271
Arrestor	425-87-06	<b>CATTCCTGGTAGAGACG</b>	2272
Secondary Cassette		Set 3	
Probe	453-23-01	ATGCGGTGACAGACCTCTCTGGAAGAT	2273
Probe	453-23-03	ATGACGTGACAGACCTCTCTGGAAGATG	2274
Invader	425-80-02	CATTTGATGTTAGTGGGCTCTCGA	2275
Arrestor	453-23-04	<b>CATCTCCAGGAGGCTCTGT-NH2</b>	2276
Secondary Cassette		Set 4	
Probe	453-23-02	ATGACGTGGCAGACCTCTCTGGAAGAT	2277
Invader	425-80-02	CATTTGATGTTAGTGGGCTCTCGA	2278
Arrestor	453-23-05	<b>ATCTCCAGGAGGCTCTGT-NH2</b>	2279
Secondary Cassette		Set 5	
Probe	435-87-04	CAGTCACGTCCTTCAGGTTTIG	2280
Invader	395-05-07	AGGCAGCTCTCAGGTACGGTGTGA	2281
FRET Probe - Secondary Reaction	524-51-01	FI-CTTC(Cy3)TCTCAGTAGCG	2282
Secondary Reaction Template	524-51-03	CGCTACTGAGATGAAGGAGACGTGACTGT-NH2	2283
Secondary Reaction Template	524-51-04	CGCTAATGAGATGAAGGAGACGTGACTGT-NH2	2284
Probe	435-87-04	CAGTCACGTCCTTCAGGTTTIG	2285
Invader	395-05-07	AGGCAGCTCTCAGGTACGGTGTGA	2286
FRET Probe - Secondary Reaction	524-51-02	FI-CTTC(Cy3)TCTCAGTAGCGA	2287
Secondary Reaction Template	524-51-05	TCGCTACTGAGATGAAGGAGACGTGACTGT-NH2	2288
Secondary Reaction Template	524-51-06	TCGCTAATGAGATGAAGGAGACGTGACTGT-NH2	2289
Human Ubiquitin			
Probe	796-72-01	AACGAGGGCGCACCTTTACATTTTCTATCGTATCC	2290
Invader	428-81-02	CCTTCCCTTATCTGGATCTTGGCA	2291
Arrestor	796-72-02	<b>GGATACGATAGAAAATGTAAGGTCGCG</b>	2292
Secondary Cassette		Set 6	
Probe	796-72-03	AACGAGGGCGCACCTTTACATTTTCTATCGTATC	2293
Invader	428-81-02	CCTTCCCTTATCTGGATCTTGGCA	2294
Arrestor	796-72-04	<b>GATACGATAGAAAATGTAAGGTCGCG</b>	2295
Secondary Cassette		Set 6	
Probe	820-35-01	AACGAGGGCGCACCTTTACATTTTCTATCG	2296
Probe	820-35-02	AACGAGGGCGCACCTTTACATTTTCTATCGT	2297
Invader	428-81-02	CCTTCCCTTATCTGGATCTTGGCA	2298
Arrestor	820-35-03	<b>ACGATAGAAAATGTAAGGTCGCG</b>	2299
Secondary Cassette		Set 7	
Probe	820-88-01	AACGAGGGCGCACCTTTACATTTTCTATCGT-NH2	2300
Probe	820-88-02	AACGAGGGCGCACCTTTACATTTTCTATCGT	2301
Probe	820-88-03	AACGAGGGCGCACCTTTACATTTTCTATCGTG	2302
Secondary Cassette		Set 7	
Probe	820-88-04	AACGAGGGCGCACCTTTACATTTTCTATCGTT	2303
Invader	428-81-02	CCTTCCCTTATCTGGATCTTGGCA	2304
Arrestor	820-35-03	<b>ACGATAGAAAATGTAAGGTCGCG</b>	2305
Secondary Cassette		Set 7	
Probe	847-65-01	GCCGCAAGCCGCTTTACATTTTCTATCGT	2306
Invader	428-81-02	CCTTCCCTTATCTGGATCTTGGCA	2307
Arrestor	847-65-02	<b>ACGATAGAAAATGTAAGGTCGCG</b>	2308
Arrestor	847-65-03	<b>ACGATAGAAAATGTAAGGTCGCG</b>	2309
Secondary Cassette		Set 8	
Probe	936-61-01	AACGAGGGCGCACCTTTACATTTTCTATCGTATCCG	2310
Invader	428-81-02	CCTTCCCTTATCTGGATCTTGGCA	2311

Same as 425-61-01 without Fluorescien

Splice Junction 4

Splice Junction 4

119

Same as 820-35-02 with 3' Amine  
 Same as 820-35-02 with O-Me U for Blocking  
 Same as 820-35-02 with O-Me G for Blocking  
 Same as 820-35-02 with T for Blocking. The T is a mismatch against the RNA sequence.

Same as 428-87-01 without Biotin blocking group

Arrestor Secondary Cassette	936-61-02	<b>CGGATACGATAGAAAATGTAAGGTGCGC</b> Set 7	Same as 428-87-03 without Biotin blocking group	2312
Monocyte Chemotactic Protein 1 (MCP-1)				
Probe	820-89-01	CCGTCACGCCCTCTTCGGAGTTTGGG		2313
Invader	685-76-01	GGGTTGTGGAGTGAGTGTTCAGTA	Same as 720-92-01 without the amine	2314
Arrestor	820-89-02	<b>CCCAAACTCCGAAGGAGGCG</b> Set 9		2315
Secondary Cassette				
MAGE-3				
Probe	1001-01-01	FTTTTCTGGAAGCTTTGCT		2316
Invader	871-18-03	<b>CGATGCAAAAGACGAGCTGCAAGGAAG</b>	Same analyte specific Region as 871-18-02.	2317
Stacker	871-18-01	<b>GAAGATCACAGGAAGAATAAC</b>		2318
Stacker	1138-50-01	<b>GCAGCTCTTGGGA</b>		2319
Probe	1138-50-02	AACGAGCGCGCACGTTGGTGGA		2320
Stacker	1138-50-03	<b>GCAGCTCTTGGGACI</b>		2321
Probe	1138-50-04	AACGAGCGCGCACGTTGGTGGA		2322
Invader	1138-50-05	CTCCAGGTAGTTTCTCTGCACGAAATC		2323
Arrestor	1138-50-06	<b>CTACCCCAACGTCGCG</b> Set 10		2324
Secondary Cassette				
Stacker	1138-51-01	<b>AGCTCTTGGGAIC</b>		2325
Probe	1138-51-02	AACGAGCGCGCACTTGGGTGAGC		2326
Stacker	1138-51-03	<b>GCTCTTGGGAICG</b>		2327
Probe	1138-51-04	AACGAGCGCGCACTTGGGTGAGCA		2328
Invader	1138-51-05	CAGGTAGTTTCTCTGCACGAAATGA		2329
Arrestor	1138-51-06	<b>IGCTCACCCCAAGTGGCG</b> Set 11		2330
Secondary Cassette				
Stacker	1138-67-01	<b>IGCAGGATCACTGCC</b>		2331
Probe	1138-67-02	AACGAGCGCGCACCAATTCATAACA		2332
Invader	1138-67-03	GGCCCTTGGACCCCA		2333
Arrestor	1138-67-04	<b>IGTATGAATTGGTGGTGGCG</b> Set 11		2334
Secondary Cassette				
Stacker	1138-67-05	<b>CAIGCAGGAICACTGC</b>		2335
Probe	1138-67-06	AACGAGCGCGCACCAATTCATAACA		2336
Invader	1138-67-07	AGGCCCTTGGACCCCA		2337
Arrestor	1138-67-08	<b>ITATGAATTGGTGGTGGCG</b> Set 11		2338
Secondary Cassette				
Human Oncostatin M				
Probe	339-30-02	CCTGGCGTATCTAGGCTCCA		2339
Invader	264-42-03	GTGTTACAGGTTTGGAGCGGATAA		2340
Arrestor	374-32-01	<b>CTTGGAGCCCTAGATAC-NH2</b>		2341
Arrestor	374-32-02	<b>CTTGGAGCCCTAGATAC-NH2</b>		2342
Arrestor	374-32-03	<b>CTTGGAGCCCTAGATAC-NH2</b> Set 12		2343
Secondary Cassette				
Probe	524-39-01	CAGTCAGCTCTCTCAGGTTTGG-NH2	Same as 435-67-04 with 3' Amine	2344
Invader	395-05-07	AGGCAGCTCTCAGGTGAGTGTGA		2345
Stacker	435-40-02	GAGCGGATATAGGCTCCA		2346
Arrestor	369-47-07	<b>CAAAACCTGAAGAGACG-NH2</b> Set 13		2347
Secondary Cassette				
Probe	1088-74-01	AACGAGCGCGCACCTCTCTGTGTG		2348
Arrestor	1088-74-02	<b>CACACAGAGGGTGGCG</b>		2349
Probe	1088-74-03	AACGAGCGCGCACCTCTCTGTGTG-NH2		2350
Probe	1088-74-04	AACGAGCGCGCACCTCTCTGTGTG-HEX	HEX = Hexanediol	2351
Invader	603-75-03	GCAAGGACCAGACTGAGCAGCGTA		2352



Stacker	752-01-05	AGCAGTACCCCATG	2353
Arrestor	641-62-04	CACACAGAGGGGCG-NH2	2354
Secondary Cassette		Set 10	
Probe	1138-49-02	AACGAGGCGCACCTTCTGGAG-NH2	2355
Stacker	1138-49-01	CIGGCCAAGGAG	2356
Invader	1138-49-03	GTCTGCTGATGAGATCTGTCTGA	2357
Arrestor	1138-49-04	CTCCAGAAAGGIGCG	2358
Secondary Cassette		Set 11	
Probe	1138-49-06	AACGAGGCGCACTCTGCTTCT-NH2	2359
Stacker	1138-49-05	GGAGCTGGCCAA	2360
Invader	1138-49-07	TGGTGTCTGCTGCATGAGATCTGA	2361
Arrestor	1138-49-08	ICCAAGAGCAGAGTGGCG	2362
Secondary Cassette		Set 11	
Probe	1138-49-10	AACGAGGCGCACCATGAGATCT-NH2	2363
Stacker	1138-49-09	GTCTGCTCTGGA	2364
Invader	1138-49-11	GAGTCTGCTGGTGTCCCTGA	2365
Arrestor	1138-49-12	AGATCTCAIGGTGGCG	2366
Secondary Cassette		Set 11	
Probe	1163-01-01	IGGCCAAAGGAGCA	2367
Stacker	1163-01-02	AACGAGGCGCACCTTCTGGAGC-NH2	2368
Invader	1163-01-03	TCCTGCATGAGATCTGTCTGCA	2369
Arrestor	1163-01-04	GCTCCAGAAAGTGGCG	2370
Secondary Cassette		Set 11	
Probe	1163-01-05	GGCCAAGGAGCAC	2371
Stacker	1163-01-06	AACGAGGCGCACCTTCTGGAGC-NH2	2372
Invader	1163-01-07	CCTGCATGAGATCTGTCTGCTA	2373
Arrestor	1163-01-08	AGCTCAGAGTGGCG	2374
Secondary Cassette		Set 11	
Probe	1163-01-09	GCCAAGGAGCACG	2375
Stacker	1163-01-10	AACGAGGCGCACCTGGAGCTC-NH2	2376
Invader	1163-01-11	CCTGCATGAGATCTGTCTGCTA	2377
Arrestor	1163-01-12	GAGCTCAGGIGCG	2378
Secondary Cassette		Set 11	
84h6r			
Probe	688-51-01	CGCCGAGATCACGCCAACGACGGTCT	2379
Invader	688-51-02	AGCCCTTGAGTTTAATACTTCATAGGCACTA	2380
Arrestor	688-51-03	AGACCGTCTGGCGGATC	2381
Secondary Cassette		Set 14	
Probe	688-51-04	CGCCGAGATCACCTCAACACCATAAAGCCCA	2382
Invader	688-51-05	CGGGAGACTGAGGAATACGTCAACCA	2383
Arrestor	688-51-06	IGGCITTTAIGGIGTGGGIGATC	2384
Secondary Cassette		Set 14	
MSH2			
Probe	690-32-02	CCGTACACGCCTCCGAACCTGCCCTAG	2385
Invader	690-32-04	GTATAATAGTCCCGACGATCAAGAGGC	2386
Stacker	709-52-01	GGTCTTGGGYAGGG	2387
Arrestor	690-32-05	GCGGAGGCTTGACGGGATC	2388
Secondary Cassette		Set 1	

SEQ ID NO

bold indicates 2' O methyl base

### ELISA Format Kits

Leukocyte-associated molecule-1 alpha subunit, human (h-LFA1)

G4731 Probe Set

p

5'-CTCTCTCGTCTCCAGGGCGTCGTCGG-PO4-3'

2389

i

5'-CTGTCAACACGTCGGTGCTGA-3'

2390

c

5'-AAAAAGGAGACGAGAGAGTG-3'

2391

for the remainder of the oligo sets on this list, the fret/target secondary sets are one of the following 11:

FRET/TARGET SETS	FRET	TARGET
set 1	307-70-03	502-93-01
set 2	307-70-03	502-93-02
set 3	187-46-01	641-60-02
set 4	187-46-01	277-68-05
set 5	187-46-01	685-56-01
set 6	187-46-01	641-60-03
set 7	187-46-01	649-10-01
set 8	680-17-02	782-70-02
set 9	187-46-01	277-68-06
set 10	187-46-01	491-02-02
set 11	307-70-03	761-40-02

### FRETS

307-70-03

5'-Fam-ATT(CY3)TCTCAGACT-NH2-3'

2392

187-46-01

5'-Fam-CAAC (CY3)GCTTCCTCCG-3'

2393

680-17-02

5'-Fam-CGCT (CY3)TCTCGCTCGC-3'

2394

### TARGETS

502-93-01

5'-CAGTCTGAGATGAATGATACGAGAGAGT-NH2-3'

2395

502-93-02

5'-CAGTCTGAGATGAATGAGACGAGAGAGT-NH2-3'

2396

641-60-02

5'-CGGAGGAAGCAGTTGGAGGCGTGACGGT-NH2-3'

2397

277-68-05

5'-CGGAGGAAGCAGTTGGTGCGCCTCGTTAA-PO4-3'

2398

685-56-01

5'-GCGGAAGAAGCGGTTGGTGATCTCGCGG-NH2-3'

2399

641-60-03

5'-CGGAAGAAGCAGTTGGAGGCGTGACGGT-NH2-3'

2400

649-10-01

5'-CGGAAGAAGCAGTTGGTGCGCCTCGTTAA-NH2-3'

2401

782-70-02

5'-GCGAGAGAGACAGCGCAACCTGCCGTTTC-3'

2402

277-68-06

5'-CGGAGGAAGCAGTTGTCCGGAAGATG-3'

2403

491-02-02

5'-CGGAAGAAGCAGTTGGAGACGTGACTGTGG-NH2-3'

2404

134/145

2405

5'-GGAGTGAGACAGCGAAAGACTGCCGTTCT-3'

# Cell Lysate Kits

adipocyte lipid binding protein, mouse (m-aP2)

C289 Probe Set

I  
p  
a  
a  
a  
p  
p  
a  
a  
p  
a  
a  
p  
p  
a  
a

FRET/TARGET SET 1

5'-CCGCCATCTAGGGTTATGATGCTA-3'  
5'-CTCTCTCGTCTCCTTACCTTCTCCTGTCG-NH2-3'  
3'-PO4-AGCAGAGGAAAGTGGAGGACAGC-5'  
3'-NH2-AGCAGAGGAAAGTGGAGGACAGC-5'  
3'-PO4-AGAGCAGAGGAAGTGGAGGACAGC-5'  
5'-AACGAGGCGCACCTTACCTTCTGTCG-NH2-3;  
5'-AACGAGGCGCACCTTACCTTCTGTCG-Biotin-3'  
3'-PO4-CCGCGTGGAAAGTGGAGGACAGC-5'  
3'-PO4-CTCCGCTGGAAGTGGAGGACAGC-5'  
5'-CATCTTCGCGGACTTACCTTCTGTCG-NH2  
3'-PO4-GCCTGAAGTGGAGGACAGC-5'  
3'-PO4-GCGCCTGAAGTGGAGGACAGC-5'  
5'-CTTGCTCCCGTGCTTACCTTCTGTCG-NH2  
5'-CTTGCTCCCGTGCTTACCTTCTGTCG-Biotin  
3'-PO4-GGGCACGAAAGTGGAGGACAGC-5'  
3'-PO4-AGGGCACGAAAGTGGAGGACAGC-5'

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G392 Probe Set

p  
I

FRET/TARGET SET 1

5'-CTCTCTCGTCTCCACATTCACACCAG-NH2-3'  
5'-TTGTGTAAAGTCACGCCCTTTCATAAT-3'

2422  
2423

rev-ErbA, mouse (m-revErbA)

C155 Probe Set

p  
I

FRET/TARGET SET 4

5'-AACGAGGCGCACGAAAGCAGGGTAATGAATCT-NH2-3'  
5'-CCACTCCTGAAGGCTCCGCAGTC-3'

2424  
2425

Carnitine palmitoyltransferase, mouse (m-CPT-1)

T352 Probe Set

p  
I

FRET/TARGET SET 2

5'-CTCTCTCGTCTCAATGCCGTGTCGCC-NH2-3'  
5'-GCTTCAGGGTTGTGCGGAAGAAGAAC-3'

2426  
2427

C851 Probe Set

p  
I

FRET/TARGET SET 2

5'-CTCTCTCGTCTCGTTTGGGCGGATACAT-NH2-3'  
5'-CGGCTTGATCTCTTTCACGGTCCAC-3'

2428  
2429

Carnitine palmitoyltransferase, human (h-CPT-1)

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U744 Probe set	FRET/TARGET SET 2	2430
p	5'-CTCTCTCGTCTCAACTTCAAAATACCACTGTAACT-NH2-3'	2431
i	5'-CTCACGTAATTTGTAGCCACACGAGTTTC-3'	2432
a	3'-NH2-GCAGAGTTGAAGTTTATGGTGACATTAGA-5'	2433
s	5'-TGGTCCAAGACCGACAGCAAAAATCTTGAG-3'	
A456 Probe Set	FRET/TARGET SET 10	2434
p	5'-CAGTCACGTCTCTTTCAGGGAGTAGCGCA-NH2-3'	2435
i	5'-CCCGTGGTAGAGAGACGACACTA-3'	2436
a	3'-NH2-GCAGAGAAAGTCCCTCATCGCGT-5'	
C759 Probe Set	FRET/TARGET SET 2	2437
p	5'-CTCTCTCGTCTCGCCACCAAGATT-NH2	2438
i	5'-CTCCCACCAAGTCGCTCACGTAATTTGTAA-3'	2439
a	5'-AATCCTGGTGGCGGAGACG-B-3'	2440
s	5'-TTAACTTCAAATACCACTGTAATCTTGGTCCAAGACCG-3'	
G329 Probe Set	FRET/TARGET SET 4	2441
p	5'-ACCGAGGCGCACCAATTATTCCTAACG-b-3'	2442
i	5'-GCCGTTTCCAGAGTCCGATTGATTTTGA-3'	2443
a	3'-(biotin)-GCCGTGGTTAATAAGGATTGC-5'	
C1763 Probe Set	FRET/TARGET SET 9	2444
p	5'-CATCTTCGCGGAGACATTTCTTGATGATTCCTT-3'	2445
i	5'-AAAAGGTCTCGGCTCGTGCT-3'	2446
a	3'-(biotin)-GCCTCTGTAAAGAACTACTAAGGAA-5'	
Phosphatidylinositol-3-phosphate p110 __, human (h-PI3Kp110__)		
G1045 Probe Set (FV Arm)	FRET/TARGET SET 4	2447
p	5'-AACGAGGCGCACCAAGTTTCTCTGTG-NH2-3'	2448
i	5'-GACCCAGCCCTGACATGAACCTTTAC-3'	2449
a	3'-NH2-CGCCGTGGTCAAAGGAGACAC-5'	
C1521 Probe Set	FRET/TARGET SET 2	2450
p	5'-CTCTCTCGTCTCGGGAGGTAATAAAGG-NH2-3'	2451
i	5'-GCTGCCCTTTCAATAATCTTATCGAAC-3'	2452
a	3'-NH2-AGCAGAGCCCTCCCATTTATTATCC-5'	
C2667 Probe Set	FRET/TARGET SET 2	2453
p	5'-CTCTCTCGTCTCGTTGTATTCTTTAAGCCAG-NH2-3'	2454
i	5'-CGGTCCAGGTCATCCCCAGAC-3'	

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a	3'NH2-AGCAGAGCAACATAAGAAATTCGGTC-5'	2455
G537 Probe Set		
p	FRET/TARGET SET 2	
i	5'-CTCTCTCGTCTCCTCTCTGGTGATATGTTTG-NH2-3'	2456
a	5'-CTAAGTTTTTCAGGGATGGATGGTTTCATGC-3'	2457
	3'NH2-AGCAGAGGAGACACCTATACAAAC-5'	2458
T3192 Probe Set		
p	FRET/TARGET SET 2	
i	5'-CTCTCTCGTCTCAACTGTGTGGC-NH2-3'	2459
a	5'-TTAAGATCTGTAGTCTTTCCGAAC-3'	2460
	3'NH2-AGCAGAGTTTCACACACCCCG-5'	2461
Cartilage-derived morphogenic protein 1, human (h-CDMP1)		
A831 Probe Set		
p	FRET/TARGET SET 6	
i	5'-CCGTCACGCCCTCCTGTTGCCCTCCC-(biotin)-3'	2462
a	5'-AGCCTCCAACCTTCACGCTGT-3'	2463
	5'-GGAGGGCAACAGGAGGCG-(biotin)-3'	2464
A1691 Probe Set		
p	FRET/TARGET SET 5	
i	5'-CCGCCGAGATCACTGAAGAGGATGCTGATGG-(biotin)-3'	2465
a	5'-ACACCACGTTGTTGGCAGAGTCAAG-3'	2466
	5'-CCATCAGCATCCTCTTCAGTGATCTCGG-(biotin)-3'	2467
b-actin, rat (r-bACT)		
C1671 Probe Set (longer)		
p	FRET/TARGET SET 6	
i	5'-CCGTCACGCCCTCGCCCTTAGGGTTCA-NH2-3'	2468
a	5'-TCTGGGTCATCTTTTCACGGTTGA-3'	2469
s	3'-GCCGAGCGGAATCCCAAGT-5'	2470
	5'-GAGGGGCTCGGTGAGC-3'	2471
Bile Salt port Pump, rat (r-BSEP)		
p	FRET/TARGET SET 5	
p	5'-CCGCCGAGATCACGAGTTCTTGCCCTTC-(biotin)-3'	2472
i	5'-CCGCCGAGATCACGAGTTCTTGCCCTTC-NH3-3'	2473
a	5'-TTCACACACGCTTTTCTGCTGATCTCC-3'	2474
	3'-(biotin)-CTAGTGCTCAAGAACGGAAAG-5'	2475
G1288 Probe Set		
p	FRET/TARGET SET 2	
i	5'-CTCTCTCGTCTCCAGAGGCCAGT-(biotin)-3'	2476
a	5'-TTCCTTCATCTAGGACAAAGTGTGGAACATAA-3'	2477
	5'-ACTGGCCTTCTGGGAGACG-(biotin)-3'	2478

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704250" 92449860

A790 Probe Set	FRET/TARGET SET 6	2479
p	5'-CCGTCACGCCTCTTTCCCTCATTCTCCT-(biotin)-3'	2480
i	5'-CCCAATTTCATTCTCATTATTCTCCGGAAGTAAATC-3'	2481
a	5'-AGGAGAATGAGGAAAGAGGCG-(biotin)-3'	
Nitric Oxide Synthase 2A, human (h-iNOS2)		
A3418 Probe Set	FRET/TARGET SET 6	2482
p	5'-CCGTCACGCCTCTGTCTTTCTTCGCG-(biotin)-3'	2483
i	5'-GCTGCACCGCCACCCC-3'	2484
a	5'-GCGAAGAAAGACAGAGGCG-(biotin)-3'	
Neutral Carboxy Ester Hydrolase, human (h-NCEH)		
A1221 Probe Set	FRET/TARGET SET 7	2485
p	5'-AACGAGGGCGCACTCTTCTTATTCTCCTG-B-3'	2486
p	5'-AACGAGGGCGCACTCTTCTTATTCTCCTG-NH2-3'	2487
i	5'-GTCTCAAAGTCCACCACAGTCTC-3'	2488
s	5'-CAGGAGAAATAAGAAAGAGTGCGCG-(biotin)-3'	
A1221 Probe Set	FRET/TARGET SET 6	2489
p	5'-CCGTCACGCCTCTCTTCTTATTCTCCTCC-3'	2490
p	5'-CCGTCACGCCTCTCTTCTTATTCTCCTCC-NH2-3'	2491
i	5'-GTCTCAAAGTCCACCACAGTCTC-3'	2492
a	3'-GCGGAGAGAGAATAAGAGG-5'	2493
s	5'-TGGGATGGGTCTCTGGGC-3'	
C1309. Probe Set	FRET/TARGET SET 8	2494
p	5'-GAACGGCAGGTTTGGCACTCTTGGCATT-NH2-3'	2495
i	5'-CAGGTAGGCGTAGGTCTTGA-3'	2496
a	3'-NH2-CGTCCAAACCGTGAGAACCGTAA-5'	2497
s	5'-GGCTCTGTGCTGGGCTA-NH2-3'	
Peroxisomal Proliferation Activator Protein Receptor alpha, human (h-PPAR_)		
G1480 Probe Set	FRET/TARGET SET 6	2498
p	5'-CCGTCACGCCTCCCGACTCCGTCT-(biotin)-3'	2499
i	5'-CGGGTGCAGCGCAGCATT-3'	2500
a	5'-AGACGGAGTCGGAGGCG-(biotin)-3'	
A1044 Probe Set	FRET/TARGET SET 6	2501
p	5'-CCGTCACGCCTCTGTCACTTGATCGTTCT-(biotin)-3'	2502
i	5'-TGGCCTCATAAAGTCCGTATTTTAGCAAAG-3'	2503
a	5'-AGAACGATCAAGTGACAGAGGCG-(biotin)-3'	

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C 1311 Probe Set

p 2504  
i 2505  
a 2506

FRET/TARGET SET 6  
5'-CCGCCGAGATCACGTGTCTTACGTTTAGAAG-(biotin)-3'  
5'-CACATGTACAATACCCCTCTGCATTTTTCATC-3'  
5'-CTTCTAAACGTTAGGACACGTCGATCTCGG-(biotin)-3'

Peroxisomal Proliferation Activator Protein Receptor beta, human (h-PPAR\_)

A595 Probe set

6B. Designed truncated probe and stackers to reduce temperature  
p 2507  
i 2508  
a 2509  
s 2510

FRET/TARGET SET 6  
5'-CCGTCACGCCCTCTCTTCTGAATCTTGC-3'  
5'-CTGGCACCTTGTGCGGTTCTA-3'  
3'-NH2-GCGGAGAGAAGACTTAGAACG-5'  
5'-AGCTGCGCTCACACTTCTCGT-3'

FRET/TARGET SET 6

6C. Design for new INVADER assay with 50% 2'-Me.

p 2511  
i 2512  
a 2513  
s 2514

5'-CCGTCACGCCCTCTCTTCTGAATCTTG-NH2-3'  
5'-CTGGCACCTTGTGCGGTTCTA-3'  
3'-NH2-GCGGAGAGAAGACTTAGAAC-5'  
5'-CAGCTGCGCTCACACTTCTCGT-NH2-3'

6D. Truncate probe.

p 2515  
i 2516  
s 2517

FRET/TARGET SET 6  
5'-CCGTCACGCCCTCTCTTCTGAATCTT-NH2-3'  
5'-CCTGGCACCTTGTGCGGTTCTA-3'  
5'-GCAGCTGCGCTCACACTTCTCGT-NH2-3'

C891 Probe Set

p 2518  
i 2519  
a 2520  
s 2521

FRET/TARGET SET 7  
5'-AACGAGCGCGCACGGTAGGCATTGTAGA-3'  
5'-CCTTCTTTTGGTCATGTTGAAGTTTTCAC-3'  
3'-CGCGTGCCATCCGTAACATCT-5'  
5'-TGTGCTTGGAGAAAGCCTTCA-3'

Substance P, rat (r-SubP)

C344 Probe Set

p 2522  
i 2523  
a 2524  
s

FRET/TARGET SET 6  
5'-CCGTCACGCCCTCGCCACTTGTTTTTCA-NH2-3'  
5'-CCATGCCCATAAAGAGCCCTTTAACAGGA-3'  
3'-NH2-GCGGAGCGGTGAACAAAAGT-5'  
NO STACKER

A396 Probe Set

p 2525

FRET/TARGET SET 6  
5'-CCGTCACGCCCTCTTTATGCGCTTTTGTGA-NH2-3'

i 5'-TGCCCATTAGTCCAAACAAGGAATCTGTA-3' 2526  
a 3'-GCGGAGAAATACGGAACACT-5' 2527  
s 5'-GAGATCTGACCATGCCATAAAGAGCC-NH2-3' 2528

C752 Probe Set  
p 5'-AACGAGGCGCACGCTGGCAAACTTGT-NH2-3' 2529  
i 5'-CCTTTCTGTCTTTGGAGACTTGCATCA-3' 2530  
a 3'-NH2-CGCGTGGACCGTTTGAACA-5' 2531  
s 5'-ACAACTCCATCAACACTGTGCTTTGCTG-NH2-3' 2532

Hepatic Lipase, human (h-LIPC)  
A830 Probe Set  
p 5'-AACGAGGCGCACTCTAGGAAGTGGCA-NH2-3' 2533  
i 5'-GTGCTGGCAATATGTCTGTAGAGCG-3' 2534  
a 3'-NH2-CGCGTGAGATCCTTCACCGT-5' 2535  
s 5'-GCCAGGCTGGAAGGAGC-NH2-3' 2536

C1154 Probe Set  
p 5'-CCGCGGAGATCACCGTCTCAGTTTGGT-NH2-3' 2537  
i 5'-CGAGTAGTGACATGGTAAAGTTGTTGATTGGCT-3' 2538  
a 3'-NH2-CTCTAGTGGCAGAGTCAAACCA-5' 2539

Hepatic Lipase, rat (r-LIPC)  
G357 Probe Set  
p 5'-CCGCGGAGATCACCGTTCACGGGT-NH2-3' 2540  
i 5'-GGGAGATCCAGTCCACTAATCCA-3' 2541  
a 3'-NH2-TCTAGTGGTGCAAGTGCCCAA-5' 2542  
s 5'-GGGACTGTCTGGGACTTCAGG-NH2-3' 2543

C1167 Probe Set  
p 5'-GAACGGCAGGTTTGGGGAATTTCTTTATTTCTT-NH2-3' 2544  
i 5'-ATTCCTTCGCCCAGGGTGATG-3' 2545  
a 3'-NH2-GTCCAAACCCCTTAAAGAAATAAGAA-5' 2546  
s 5'-CTTTTGTCCCCAGCAGTGT-NH2-3' 2547

Metabotropic Glutamate Receptor 2, rat (r-mGluR2)  
C1403 Probe Set  
p 5'-AACGAGGCGCACGCTGGTGGGA-NH2-3' 2548  
i 5'-GCCTCATAGCATCGCAGAGGTGT-3' 2549  
a 3'-NH2-CGCGTGGCACCACCAACCCT-5' 2550  
s 5'-CAGAGGGCACGGTGCATGTTGT-NH2-3' 2551



G-protein coupled receptor 2, rat (r-ETBR-LP2)

A1629 Probe set

p  
l  
a  
s

FRET/TARGET SET 8  
5'-GAACGGCAGGTTTGTCTCAGCAGACCGC-NH2-3'  
5'-GAGAGGCCAAAGTGAGACCATGTGAAAGAAA-3'  
3'-NH2-CGTCCAAACAGTCGTCTGGCG-5'  
5'-CATGGATCGGCATGGCCCC-NH2-3'

2552  
2553  
2554  
2555

i kappa b alpha, human (h-MAD3)

C542 Probe Set

p  
l  
a

FRET/TARGET SET 7  
5'-AACGAGGCGCACGGTGTAGGGGGG-(biotin)-3'  
5'-GCCCTGCTCACAGGCAAT-3'  
5'-CCCCCTACACCGTGCGC-(biotin)-3'

2556  
2557  
2558

C363 Probe Set

P  
l  
A

FRET/TARGET SET 6  
5'-CCGTCACGCCCTCGTCAGTGCCTTTTC-(biotin)-3'  
5'-CACCTGGCGGATCATTCCATGT  
5'-GAAAGGCACTGACGAGGCG-(biotin)-3'

2559  
2560  
2561

G953 Probe Set

P  
l  
A

FRET/TARGET SET 6  
5'-CCGTCACGCCCTCCCTCATCCTCACT-(biotin)-3'  
5'-ACTCTGACTCTGTGCATAGCTCTT  
5'-AGTGAGGATGAGGAGGCG-(biotin)-3'

2562  
2563  
2564

C923 Probe Set

P  
l  
A  
S

FRET/TARGET SET 7  
5'-AACGAGGCGCACGGTTTTCTAGTGTCANH2-3'  
5'-CTCACTCTCTGGCAGCATCTGAAT-3'  
3'-NH2-CGCGTGCCAAAGATCACAGT-5'  
5'-GCTGGCCCCAGCTGC-NH2-3'

2565  
2566  
2567  
2568

Lecithin cholesterol acyltransferase, human (h-LCAT)

C821 Probe Set (truncated Probe Design)

p  
l  
a  
s

FRET/TARGET SET 5  
5'-CCGCCGAGATCACGGTTATGCGCTG-NH2-3'  
5'-CCAGGGGGAGGTGGTC-3'  
3'-NH2-TCTAGTGCCCAATACGCGACG-5'  
5'-CTCCTCTTTTCAGCTTGATGCTGG-NH2-3'

2569  
2570  
2571  
2572

C827 Probe Design

p  
l  
a

FRET/TARGET SET 8  
5'-GAACGGCAGGTTTGGGTGGTGGTTATGCG-NH2-3'  
5'-AGAGGGGAAACATCCAGGGGGAG-3'  
3'-NH2-CGTCCAAACCCACCAATAACGC-5'

2573  
2574  
2575

C1217 Probe Design																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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142/145

G119 Probe Set (MO4 Arm)

p  
l  
a

FRET/TARGET SET 6  
5'-CCGTCACGCCTCCTTTACATTTTCTATCGTATCCG-(biotin)-3'  
5'-CCTTCCTTATCCTGGATCTTGGCA-3'  
3'-(biotin)-GCGGAGGAAATGTAAAGATAGCATAGGC-5'

2601  
2602  
2603

G119 Probe Set

p  
l  
a

FRET/TARGET SET 5  
5'-CGCCGAGATCACCTTTACATTTTCTATCGTATCCG-(biotin)-3'  
5'-CCTTCCTTATCCTGGATCTTGGCA-3'  
3'-(biotin)-CTAGTGGAAATGTAAAGATAGCATAGGC-5'

2604  
2605  
2606

G131 Probe Set

p  
l  
a

FRET/TARGET SET 9  
5'-CATCTTCGCGGACTGGATCTTGGCC-(biotin)-3'  
5'-GCTGATCAGGAGGAATCCTTCCTTATCT-3'  
3'-(biotin)-GCCTGACCTAGAACCCGG-5'

2607  
2608  
2609

Scanned G119 region (ELISA format (No Arrestors)

p  
p  
p  
p  
p  
l  
l  
l  
l  
l  
l

5'-CTCTCTCGTCTCTACATTTTCTATCGTATCCGA-NH2-3'  
5'-CTCTCTCGTCTCTACATTTTCTATCGTATCCG-NH2-3'  
5'-CTCTCTCGTCTCTACATTTTCTATCGTATCCG-NH2-3'  
5'-CTCTCTCGTCTCTACATTTTCTATCGTATC-NH2-3'  
5'-CTCTCTCGTCTCGCCTTACATTTTCTATCG-NH2-3'  
5'-GGAAATCCTTCCTTATCCTGGATCTTGA-3'  
5'-GGAAATCCTTCCTTATCCTGGATCTTGGC-3'  
5'-CCTTCCTTATCCTGGATCTTGGCA-3'  
5'-TTCCTTATCCTGGATCTTGGCCA-3'  
5'-TCCTTATCCTGGATCTTGGCCTA-3'

2610  
2611  
2612  
2613  
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2615  
2616  
2617  
2618  
2619

Ubiquitin, mouse (m-UBIQ)

G294 Probe Set

p  
l  
a

FRET/TARGET SET 7  
5'-CCGTCACGCCTCCTTCTGGATGTTGTA-(biotin)-3'  
5'-CCAGGTGCAGGGTTGACTA-3'  
3'-(biotin)-GCGGAGGGAAGACCTACAACAT-5'

2620  
2621  
2622

G294 Probe Set

p  
l  
a

FRET/TARGET SET 5  
5'-CGCCGAGATCACCTTCTGGATGTTGTA-(biotin)-3'  
5'-CCAGGTGCAGGGTTGACTA-3'  
3'-(biotin)-CTAGTGGGAAGACCTACAACAT-5'

2623  
2624  
2625

G294 Probe Set

p  
l

FRET/TARGET SET 6  
5'-CCGTCACGCCTCCTTCTGGATGTTGTAAT-NH2-3'  
5'-CCAGGTGCAGGGTTGACTA-3'

2626  
2627

a	3'-NH2-GCGGAGGGAAGACCTACAACATTA-5'	2628
G294 Probe Set	FRET/TARGET SET 6	
p	5'-CCGTCACGCCTCCCTTCTGGATGTTGTAATC-NH2-3'	2629
i	5'-CCAGGTGCAGGGTTGACTA-3'	2630
a	3'-NH2-GCGGAGGGAAGACCTACAACATTAG-3'	2631
T514 Probe Set	FRET/TARGET SET 7	
p	5'-AACGAGGCGCACATGTTGTAATCAGAGAGGG-NH2-3'	2632
i	5'-TGCAGGGTTGACTCTTTCTGGA-3'	2633
a	3'-NH2-CGCGTGTACAACATTAGTCTCTCTCCC-5'	2634
G750 Probe Set	FRET/TARGET SET 9	
p	5'-CATCTTCGCGGACCTTCTGGATGTTGTA-NH2-3'	2635
i	5'-GGACCAGGTGCAGGGTTGACTT-3'	2636
a	3'-NH2-GCCTGGAAGACCTACAACAT-5'	2637
G185 Probe Set	FRET/TARGET SET 9	
p	5'-CATCTTCGCGGACCTCAGTTCTCGATGG-NH2-3'	2638
i	5'-CCCTCTTTATCCTGGATCTTGGCA-3'	2639
a	3'-NH2-GCGCCTGAAGTGCAAGAGAGCTACC-5'	2640

FIGURE 48

12		
1	8	C
2	5	U
3	5	U
4	2	U
5	1	U
6	2	C
7	7	G
8	7	A
9	1	U
10	1	C

0986443 05244  
T04230" 22442860

145/145